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FINAL EVALUATION REPORT

CHILD SURVIVAL PROGRAM

(492-0406)

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EXECUTIVE SUMMARY

The Philippine Child Survival Program (CSP) (492-0406) was a USAID-funded performance-based sector assistance program designed to address specific constraints to the delivery of child survival services by the Government of the Philippines (GOP) Department of Health (DOH). Its goal was to reduce infant/child mortality, and its purpose was to increase the "availability, utilization and sustainability" of child-survival services.

Lack of targeting, centralization, lack of integration, low demand for preventive health care, and a need to address long-term financial sustainability were identified by the CSP as key problems to be resolved in order to achieve a sustained decrease in infant, child and maternal mortality.

To this end, the CSP provided \$50 million in grant funds broken down as follows: \$45 million as performance disbursements to the GOP and \$5 million in technical assistance obtained through direct USAID contracts and grants. Performance disbursements under the CSP were made annually upon the accomplishment by the DOH of a set of policy objectives set forth in a policy matrix jointly developed by USAID and the DOH.

The CSP design proved to be an appropriate response to constraints in the effective delivery of child survival services. The policy reforms and objectives identified reflected accurate analyses of the problems, and of the measures required to overcome them in a sustainable manner. The performance benchmarks selected were, on the whole, accurate measures of achievement of policy reform.

The use of a performance-based program mode of disbursement, rather than project assistance, was an appropriate instrument for achievement of the program's purpose in the Philippine context, where there was agreement as to what should be done, and the DOH had the technical and managerial capacity, given adequate resources and leverage, to do it.

DOH and USAID implementation of the CSP was effective, well coordinated, and highly accountable. All benchmarks were met, not only on paper, but in fact, resulting in tangible policy reform.

The CSP policy reforms were in turn highly effective in achieving the desired program purpose. Particularly high-impact changes included:

- increased prioritization of child survival
- identification of underserved areas and effective, decentralized health planning from the bottom up
- definition/implementation of a well-chosen core package of Maternal-Child Health (MCH) interventions, including Control of Acute Respiratory Infection (CARI), which was new to the Philippines, and Family Planning (FP), which was revived after a period of stagnant implementation
- a comprehensive IEC strategy utilizing various media to increase consumer demand and promote improved health behaviors
- strengthening of supervision through integrated, criteria-based supervisory systems and health information systems

Significant, measurable gains in child-survival service delivery occurred during the course of the CSP, particularly with respect to immunization, ORT and CARI.

These gains in turn appear to have impacted on mortality. A consistent and credible pattern is seen of decreased infant/child deaths from pneumonia, diarrhea and immunizable diseases between the years

1988-1994, suggesting that the achievement of the project purpose (improved delivery of child survival services) did, in fact, contribute to the goal of decreasing infant/child mortality. The greatest impact appears to have been in decreased ARI deaths, most likely attributable to the combined effect of the new CARI initiative, improved measles immunization coverage, Vitamin A capsule distribution and other nutritional interventions. The reduction in ARI deaths appears to have been in the range of 25 - 50%, -- resulting in over 10,000 infant/child deaths averted per year.

The DOH effectively leveraged other donor assistance and GOP resources in implementing the CSP. The recurrent costs of improved service delivery were effectively absorbed by the GOP following the end of program disbursements, and substantive work on health care financing begun under the CSP continues.

During the program period a major and unanticipated event occurred with far-reaching implications for the entire health system. Under the Local Government Code, authority for the delivery of health services was transferred from the Department of Health to Local Government Units -- municipalities and provinces. This devolution was fully implemented in 1993, four years into the program period and after all program disbursements and benchmarks were completed. Hence, the CSP concluded in a radically changed context than prevailed when it was designed and during most of its implementation.

Sustaining and expanding on the impressive achievements of the Philippine Child Survival Program will be heavily contingent on successful management of the devolution process, both by the LGUs and the DOH. To date, the focus of GOP and donor attention to devolution has been on enabling the LGUs to effectively take on their new role in implementing field health services. Insufficient attention has been paid to the DOH's new role and changes needed to effectively undertake it.

The response of the DOH as an institution to devolution has to date been less than adequate. Problems are conceptual, operational, and structural. Conceptually, both managers and personnel have difficulty envisioning effective leadership through means other than line authority, and the DOH tends to see itself as primarily concerned with its own (now diminished) personnel and structures rather than with the national health system as a dynamic whole. Operationally, DOH capacities in the key arenas through which it can continue to direct health sector are under-developed: policy; regulatory functions; advocacy; and the compilation, analysis, dissemination and strategic use of information. Structurally, the DOH has not defined the respective roles and functions of its central and regional offices, and the structural organization of the central office is still that of an implementing organization.

The systemic transformations required of the DOH have been under-appreciated and remain largely unimplemented. Technical/functional linkages between the DOH and devolved health personnel at the provincial and municipal level, and between provincial and municipal level devolved personnel, were inadvertently severed along with the loss of administrative line authority. As a consequence, rather than a re-configured health system, there is a shattered and fragmented one; rather than new relationships between the DOH and devolved health personnel, there is an absence of relationship. Technical supervision, monitoring and support to the RHUs/BHSEs have been substantially weakened; and hospital services are increasingly isolated from the preventive and primary services.

The DOH and donors are attempting to interface with LGU health services at the level of the province, but province-municipality links are weak to non-existent, and primary services are under the administration of the municipality, not the province.

It is strongly recommended that USAID assist the DOH in respect to policy changes supportive of:

- Re-establishment of functional linkages between/ among the DOH and devolved health personnel/facilities at the provincial, municipal and barangay levels;

- Re-definition and clarification of the roles and relationships of the DOH central and Regional Offices, and devolved provincial and municipal health personnel;
- Re-introduction of a decentralized health planning process used under the CSP but inadvertently abandoned in the wake of devolution, as a means of creating municipal-provincial linkages;
- A re-organization of the DOH in a manner which facilitates operations in the devolved context;
- Expansion of DOH capacities in the areas of policy formulation/implementation, regulation/licensure, advocacy, negotiation, research, monitoring and evaluation, and exploration by the DOH of new means of ensuring the quality of field health service delivery within the devolved framework, eg. through the exercise of its regulatory, licensing and accreditation powers.

In order to maintain and build upon technical gains made under CSP, it is further recommended that:

- the USAID Integrated FPMH Program include both MCH and FP in its training, research, monitoring and IEC assistance components;
- the DOH continue to accord high budgetary priority to MCH interventions, particularly the provision of key MCH program drugs and supplies to the LGUs: vaccines and peripherals, cotrim, ferrous sulfate, and sufficient Vitamin A Capsules to cover all children under five at six month intervals.
- the DOH take steps to explore apparent inaccuracies in service statistic reports of immunization coverage, and to re-establish the flow of routine health information reports from the LGUs.

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LIST OF ACRONYMS AND ABBREVIATIONS

ADB	Asian Development Bank
APBHP	Area/Program-Based Health Plan
ARI	Acute Respiratory Infections
BF	Breastfeeding
BHS	Barangay Health Station
BHW	Barangay Health Worker
CARI	Control of Acute Respiratory Infections
CDD	Control of Diarrhoeal Diseases
CHCA	Comprehensive Health Care Agreement
CHO	City Health Office
CHS	Community Health Service
COPR	Category of Policy Reform
CPR	Contraceptive Prevalence Rate
CS	Child Survival
CSP	Child Survival Program
DBM	Department of Budget and Management
DDM	Data For Decision Making
DHS	Demographic Health Survey
DIRFO	Department of Health Integrated Regional Field Office
DOH	Department of Health
DT	Diphtheria-Tetanus
EPI	Expanded Program for Immunization
FETP	Field Epidemiology Training Program
FHSIS	Field Health Services Information System
FP	Family Planning
FPMD	Family Planning Management Development
GO	Governmental Organization
GOP	Government of the Philippines
HFDP	Health Finance Development Project
HIS	Health Information Service
HMO	Health Maintenance Organization
IFPMCHP	Integrated Family Planning/Maternal Child Health Program
IEC	Information, Education and Communication
IMR	Infant Mortality Rate
IPHO	Integrated Provincial Health Office
IRA	Internal Revenue Allotment
ISC	Integrated Supervisory Checklist
IUD	Intrauterine Device
LGAMS	Local Government Assistance and Monitoring Service
LCE	Local Chief Executive
LGC	Local Government Code
LGU	Local Government Unit
LPP	LGU Performance Program
MC	Maternal Care
MCH	Maternal and Child Health
MHO	Municipal Health Officer
MICAMCH	Midwives' Integrated Communication Aid for MCH
MOM	Management Ownership Matrix
MSH	Management Sciences for Health
NGO	Nongovernmental Organization
NHS	National Health Survey

NID	National Immunization Day
NSO	National Statistics Office
OPHN	Office of Population, Health and Nutrition
ORESOL	Oral Rehydration Solution (brand name)
ORS	Oral Rehydration Solution
ORT	Oral Rehydration Therapy
PAAD	Program Assistance Agreement Document
PCU	Project Coordinating Unit
PHDP	Philippine Health Development Project
PHN	Public Health Nurse
PHO	Provincial Health Officer
PIHES	Public Information and Health Education Service
PIO/T	Project Implementation Order/Technical
RESU	Regional Epidemiologic Surveillance Unit
RF	Reporting Form
RHU	Rural Health Unit
RHM	Rural Health Midwife
TA	Technical Assistance
TAT	Technical Assistance Team
TCL	Target Client List
TFR	Total Fertility Rate
TT	Tetanus Toxoid
U5	Under Fives
USAID	United States Agency for International Development
VAC	Vitamin A Capsule
WHO	World Health Organization

I. PROGRAM DESCRIPTION

The Child Survival Program (CSP) (492-0406) was a USAID-funded performance-based sector assistance program designed to address specific constraints to the delivery of child survival services by the Government of the Philippines (GOP) Department of Health (DOH). The CSP Grant Agreement was signed on September 29, 1989 with a completion date of March 31, 1994. This was later extended to March 31, 1995 with no change in level of funding. The program's goal was to:

"contribute to a reduction in the variance in infant and child mortality and morbidity rates among and within provinces and regions while simultaneously lowering the corresponding national rate".

The program purpose was to:

"increase the availability, utilization and sustainability of child-survival-related services, including child spacing, particularly to underserved and high risk groups.

To this end the CSP provided \$50 million in grant funds: \$45 million as performance disbursements to the GOP and \$5 million in technical assistance obtained through direct USAID contracts and grants.

Performance disbursements under the CSP were made annually upon the accomplishment by the DOH of a set of policy objectives set forth in a policy matrix jointly developed and approved by USAID and the DOH. Included in the matrix were specific indicators, or performance benchmarks, for each policy objective. The core matrix and an initial set of benchmarks were developed as part of the original program design and set forth in the program agreement. There was no change in the policy objectives as originally defined over the life of the program and no substantive change in the actions to be taken in pursuit of those objectives. Minor revisions to the specific benchmarks, and formulation of additional benchmarks, were made in the course of annual USAID-DOH performance reviews as needed to ensure achievement of the desired policy reform.

Performance disbursements by USAID under the CSP were made in dollars and utilized by the GOP in servicing the foreign debt. There were no funds allocated by USAID to the DOH itself. However, as will be described, the DOH was able to utilize the CSP as leverage in obtaining increased GOP resources for priority health sector activities. Under the terms of the Program Agreement no specific counterpart funding was required, other than the stipulation that "as part of the policy agenda, the GOP will ensure that the required level of resources will be provided to the DOH...in order to achieve the program targets" (CSP PAAD p.34). The policy matrix included objectives and benchmarks designed to ensure that government commitment of needed resources accompanied each policy reform.

Disbursement of the \$5 million technical assistance component followed a standard project assistance mode under a direct contract with Management Sciences for Health (MSH) for the services of five long-term resident advisors and several short-term consultants. The MSH contract was completed in June 1994. In addition, during the last year of the project, technical assistance was obtained through buy-ins to the centrally funded MSH project "Family Planning Management Development" (FPMD) and the Centers for Disease Control "Data for Decision Making" (DDM) Project. The major thrust of the FPMD assistance was to help USAID and the DOH in the design of a performance based disbursement program for LGUs, a component under the new USAID Integrated FP/MH Program approved in 1994. The DDM buy-in supported pilot work in two provinces on the use of health indicators for decision-making.

II. EVALUATION METHODOLOGY

The Child Survival Program evaluation was conducted by a team of three experienced public health professionals: one Filipino national and two expatriates, both with prior Asia/Pacific experience. The team relied upon three sources of information in assessing the CSP:

- a) a review of relevant documents, reports, and data, as detailed in Annex B.
- b) interviews with key informants as listed in Annex A. These included personnel at every level in the health system, from the Secretary of Health to traditional birth attendants; interviews with USAID personnel and other donors; and interviews with other professionals in the private/NGO sector.
- c) observations of the health system at every level, from the central to the periphery, including field visits to the following:

Region 5

Regional Health Office
Sorsogon Rural Health Unit

Sorsogon Provincial Hospital
Albay Provincial Health Office

Region 7

Regional Health Office
San Fernando Rural Health Unit
Cordova Rural Health Unit
Sta. Gabi Barangay Health Station

Cebu Provincial Health Office
Talisay Rural Health Unit
Sangat Barangay Health Station San Isidro Barangay Health
Lapu-Lapu City Health Office

Region 9

Regional Health Office

Zamboanga City Health Office

III. PROGRAM ENVIRONMENT

A. Pre-Program Situation

The years prior to the CSP reflected a return to democratic political institutions in the Philippines, beginning with Corazon Aquino's administration in February 1986 after two decades of increasingly corrupt and authoritarian rule. With this came increased attention to the needs of the disadvantaged and a push for social reform in all sectors.

Within the health sector, this was reflected in an increased government commitment to preventive health services which addressed the leading causes of excess mortality. In the mid 1980s, the under-five mortality rate in the Philippines was approximately 73.6 deaths per 1,000 live births (1993 DHS). This translated into 300 infant and child deaths a day; 20% of all reported deaths in the country occurred in infants under 1 year old. The vast majority of infant and child deaths were from causes which were either easily preventable (eg: vaccine-preventable illnesses, diarrhea) or easily treated (eg: acute respiratory infections). Pneumonia was by far the single leading cause of infant/child mortality, followed by diarrhea (HIS 1988). Over 80,000 vaccine-preventable illnesses (measles, pertussis, diphtheria, polio, neonatal tetanus) were recorded by the Department of Health (DOH) in 1988, representing only a fraction of actual cases, since not all came into contact with the public health care system.

This pattern of largely preventable infant/child mortality reflected an underutilization of preventive health care attributable to both demand (low knowledge/awareness in the population) and supply (weaknesses in service delivery) factors. Diarrhea was the second leading cause of infant/child death, usually as a result of dehydration, yet over a third of mothers surveyed in 1987 were unaware of oral rehydration salts, and two-thirds had never used them (NHS 1987). On the supply side, an expanded program of immunization (EPI) and control of diarrheal disease (CDD) program were established at a national level but many other key maternal-child health interventions were not well developed. These included two which an analysis of mortality patterns suggested were of overwhelming importance: control of acute respiratory infection (CARI) and family planning (FP).

Pneumonia was the leading cause of infant death, but diagnosis and treatment of ARIs were limited to physicians, found only at the municipality level and above — while the midwife-staffed Barangay Health Stations (BHSes) are the leading source of health care delivery for the majority of Philippine households (HIS 1988). A recently completed pilot initiative in Bohol province had demonstrated that BHS midwives could be safely and effectively trained in the management of ARIs.

Fertility was high, with a TFR of 4.42 (1986 CPS); close to two-thirds of all children born were at high risk of mortality due to a short birth interval, high parity mother, or other demographic risk factors. Over a third of all births between 1988 - 1993 occurred after a preceding birth interval of less than 24 months; the IMR for such children in the Philippines is 60% higher than that associated with adequately spaced births (1993 DHS). A large unmet demand for family planning existed, but actual contraceptive prevalence was only 36% (22% for modern methods), largely because of limited access to family planning services. The family planning program had been at a near standstill for several years; where family planning services were available, these did not include a full range of methods; eg: the midwives and nurses who staff the Barangay Health Stations and Rural Health Units had never been trained in IUD insertion. Injectable contraceptives were not available at all since, this was only re-introduced in 1993.

The aggregate national infant and child mortality rates concealed a dramatic range of conditions, with unusually high mortality in about one-third of the country's provinces and cities making a disproportionate contribution to the overall national level. Geographical variation was correspondingly marked in the delivery of those child survival interventions which were already well established nationally, eg, immunization.

A major premise of the CSP, therefore, was that significant reductions in national level maternal, infant and child mortality would only be achieved through (1) strengthening and expansion of national maternal-child health services to include effective, locally accessible treatment of acute respiratory infections and a full range of voluntary family planning services; and, (2) a narrowing of the gap between high-mortality areas and the rest of the country through the specific targeting of services and resources to them.

The validity of this analysis is well illustrated by the following tables derived from the Vital Registration System and DOH Health Information System in 1988, the year just prior to the start of CSP:

Table 1 a:

Infant Mortality Rates 1988*

<u>National</u>	<u>Range By Region.</u>	<u>Range by Province/City</u>
30.4	23.0 - 35.5	8.6 - 119.8

Table 1 b:

Immunization Coverage Rate For Highest/Lowest IMR Areas, 1988*

<u>Area</u>	<u>IMR*</u>	<u>% Fully Immunized</u>
National	30.4	71%
Low IMR* Areas:		
Ormoc City, Region 8	8.6	83%
Sultan Kudarat, Region 12	8.6	70%
Baguio City, Region 1	12.5	96%
Nueva Vizcaya, Region 2	18.4	79%
Laoag City, Region 1	18.6	74%
High IMR* areas:		
Sulu, Region 9	50.1	30%
2nd District, NCR	57.0	51%
Lapu-Lapu City, Region 7	76.7	46%
Canlaan City, Region 7	99.1	26%
Cotabato City, Region 12	119.8	44%

Note: These data are presented for purposes of inter-region, inter-province comparison only; it should be noted that vital registration systems in developing countries world-wide are apt to generate lower mortality estimates than population-based surveys. Likewise, service statistics world-wide yield higher estimates of program performance than do population-based surveys. Both discrepancies result from a tendency to inadvertently underenumerate the least accessible parts of the population, who are also by definition less likely to receive services and more at risk of death.

The true IMR for the Philippines in 1988 was certainly higher than 30.4/1,000; data from various surveys suggest an overall national IMR of anywhere between 40-60/1,000 in the late 1980's, with correspondingly higher actual rates for the regions and provinces than those listed in this table. Immunization rates were likewise lower than those listed, probably by between 10-20 percentage points.

*Sources: HIS 1987 and 1988, DOH

In addressing these needs, the DOH was fortunately possessed of a cadre of highly trained health professionals at all levels and an excellent primary health care infrastructure.

At the grass-roots level in the Philippines are a large and unusually active network of village (barangay) based volunteers trained in basic health practices, and trained traditional birth attendants (hilots). Barangay Health Stations (BHS) are staffed by Rural Health Midwives (RHM), high school graduates with two years formal health training. One BHS serves on average 1 to 3 barangays, for a population of about 2,000 - 5,000. Above the BHS is the Rural Health Unit (RHU), a facility staffed with physician Municipal Health Officers (MHO), public health nurses (PHN), midwives, dentists, sanitarians and, often, a medical technologist. RHUs serve an entire municipality, supervising and supporting the activities of the BHSes under it. At the Provincial level there is an Integrated Provincial Health Office (IPHO) staffed by a physician Provincial Health Officer (PHO) who is also Chief of the Provincial Hospital, supervisory PHNs, and Program Coordinators for various services eg: expanded program of immunization (EPI), control of diarrheal disease (CDD), the national tuberculosis program (NTP) etc. These program coordinators are generally physicians, often with additional formal training in public health or other specialties. A Provincial Hospital, staffed with physicians, nurses, medical technologists, radiologists etc, provides tertiary care to the entire province.

At the Regional level is a Department of Health Integrated Regional Field Office (DIRFO), headed by a physician Regional Director with extensive public health expertise, and staffed with Program Coordinators and other technical staff. At the Central level is the Department of Health, headed by a Secretary and several Undersecretaries.

There has historically been a direct line of administrative authority from the central DOH down through the Region, Province, Municipality/City and Barangay, each of which comprised a distinct administrative layer. In the post-Marcos era, a new DOH administration was committed to a change in the centralized procedures and non-participatory style of management which had been in place for decades. Administration and planning were highly centralized, constraining the health system's ability to identify local program needs and respond accordingly. Planning was conducted from the top down, and while planners at the central level tried to take into account provincial level variations in performance, there was little two-way communication or scope for bottom-up elucidation of the reasons for low performance.

While at the municipal and barangay level all maternal-child health services were delivered by the same health worker, a vertical program structure prevailed from the provincial level on up with limited coordination between the MCH, nutrition and family planning service offices at the national level. Programs were autonomous and had their own funding and separate activities. Providers were required to report their activities on multiple separate forms, one for each vertical program. Supervision by provincial, regional and central level personnel was likewise vertical in focus, with program coordinators visiting the field to monitor only the specific program(s) for which he/she was responsible.

As a result of strengthened political commitment to health, GOP budget allocations to the sector increased substantially after 1986, from 3.6 billion pesos in 1986 to 6.8 billion in 1989, the year the CSP began. With this came an increased allotment to preventive services. With a goal of expanding service coverage and a target group rapidly increasing in size, resources remained a serious constraint to the health program despite increased allocations, a problem only likely to worsen in the coming years as a result of successes in expanding coverage combined with the demographic swelling of the target group. Increased public sector funding alone could not sustain the desired service delivery over the decade to come. While financial sustainability was a critical issue to be addressed by the start of the CSP, the actual costs of various services were poorly understood and the database needed to identify and test methods of improved cost efficiency and effectiveness was lacking. Revenue generation within the public system and the contributions (actual and potential) of the private sector in

health care delivery had been little explored.

B. Changes in the Program Environment

During the program period a major and unanticipated event occurred with far-reaching implications for the Philippine health system. The Local Government Code (LGC), passed in late 1991 for full implementation by January 1993, transferred authority for delivery of health services from the DOH to the Local Government Units (LGUs) -- municipalities, cities and, in the case of Provincial Hospitals, provinces. Midwives, nurses, physicians and other health personnel at these levels now report directly to local political leaders. The DOH, while still mandated "to be the primary national government agency responsible for the protection and promotion of the people's health", must, under the LGC, fulfill that role through means other than direct implementation of health services -- a major shift in orientation for a large bureaucracy heavily focused on service delivery. This devolution was placed in effect in 1993, four years into the project period, after a year of preparatory transitional work. Hence, the CSP concluded in a radically changed context than prevailed when it was designed and during most of its implementation; all but \$3 million of the \$45 million in performance-based disbursements, and all of the policy reforms under the project, occurred prior to devolution.

The evaluation team thus found itself with a dual task: (1) assessing the CSP's achievements and impacts within the context for which it was designed and implemented (pre-devolution); and (2) assessing the impact of devolution on program achievements and the health sector as a whole.

IV. MAIN FINDINGS

A. Program Implementation: USAID and DOH Management

Lack of targeting, centralization, lack of integration, low demand for preventive health, and a need to address longterm financial sustainability were identified by the CSP as key problems to be resolved in order to achieve a sustained decrease in infant, child and maternal mortality.

To this end, the CSP policy matrix laid out a series of policy reforms and operational measures of same, to be enacted in the expectation that this would in turn result in increased provision, utilization and sustainability of child-survival related services. Benchmarks for the key policy objectives were formulated in measurable terms and given completion date targets, usually in the last quarter of the calendar year (corresponding to the GOP fiscal year). Annual USAID-DOH progress reviews were then held to determine whether or not the required benchmarks had been met, based on documentation provided by the DOH, and the USAID Office of Population, Health and Nutrition (OPHN)'s own observations of changes within the health system.

The DOH established a Program Coordinating Unit (PCU) within the Office of the Chief of Staff. Staffed with highly skilled contracted professionals, the PCU was explicitly charged with tracking progress towards the benchmarks and coordinating with all concerned DOH offices and services accordingly. This facilitated close attention to the myriad of actions required to fulfill each of the 33 benchmarks and ensured that nothing fell through the cracks. The PCU also maintained close linkages with the DOH Financial Service and GOP Department of Budget and Management, tracking the release and allocation of CSP augmentation funds provided by the GOP. Monthly progress monitoring meetings were held between PCU and DOH managers with benchmark completion responsibilities.

The Technical Assistance Team (TAT) funded under the project through a direct USAID contract with

Management Sciences for Health (MSH) played a key role assisting DOH managers in fulfilling benchmark responsibilities through provision of technical assistance and advice, particularly with respect to the development and implementation of a new health planning process; a new health information system; and a new supervisory tool.

USAID OPHN technical staff worked closely with DOH counterparts in monitoring progress towards achievement of benchmarks and, most importantly, assessing whether the desired policy objectives were in fact being met. Quarterly benchmark review meetings were held between USAID and the DOH. The first such meeting in an implementation year served to clarify benchmarks and plan how they would be met. During this meeting, USAID technical staff and DOH managers agreed on a common interpretation of the benchmarks and the type of documentation each required. Workplans with timelines and assigned responsibilities were then established by the DOH.

The second quarterly review consisted of a review of progress made, six months into the implementation year. Issues and constraints were identified, along with agreement as to any actions needed to correct them. In this manner, benchmarks in danger of non-completion were identified early enough to permit the DOH to intensify its efforts and, if necessary, revise its approach in time to meet the deadlines, generally set for October-December of that year. In the rare instances where unforeseen complexities made achievement of the benchmark unfeasible, this allowed for adequate time to negotiate revisions before the due date arrived.

The third quarterly review entailed a review of benchmark documentation, which was presented, discussed and critiqued, allowing USAID and the DOH to identify any additional needed information or documentation prior to the final submission.

The fourth quarterly review session consisted of a formal presentation to USAID by the DOH of documentation of completion of the required benchmarks.

Within USAID, the OPHN conducted its own internal assessment based on the documentation received, observations of the progress of policy reform, and any other available data. OPHN would then draft an Action Memorandum for presentation to a Mission Review Committee. This document included an analysis of performance and assessment of whether or not each benchmark had been met, along with a specific recommendation for USAID response. These memoranda were then subjected to a level of scrutiny almost comparable to that of a new project proposal, with issues papers developed by other USAID offices, a formal review held during which OPHN defended its recommendations, etc. Following this review and incorporation of salient Committee recommendations, a revised Action Memorandum was processed through the Mission for clearance and presented to the Director for approval, leading to release of that year's tranche of funding.

The system of quarterly progress reviews between DOH and USAID were highly effective in keeping the program on track. On numerous occasions potential problems were identified and solved, usually through a new plan of action by the DOH and less often, by a revision to the benchmark. Of a total of 33 benchmarks, only 6 underwent revision. Of these revisions, 4 consisted of a clearer and more detailed definition, one entailed a change in strategy (but not substance of the benchmark). Only one revision was made which involved a substantive change in the benchmark. Additional benchmarks were added on several occasions when the DOH and USAID agreed that, although the benchmark had been met, more needed to be done to achieve the desired policy reform.

The USAID Mission's internal processes which followed this already rigorous system of DOH-USAID review seems somewhat over-zealous and perhaps reflective of uneasiness with the use of program assistance in the health sector. A sizable paper trail of documentation resulted (reflecting no small investment of time) but it is questionable whether this in fact enhanced an already excellent degree of

accountability. It did ensure, however, that OPHN technical staff's management load remained as high as it would be under a conventional project mode of assistance.

B. Program Implementation: Achievement of Performance Benchmarks

Achievement of the program's purpose (increased availability, utilization and sustainability of child survival services) was pursued through two complementary strategies:

- (a) Strengthening of service delivery through policy reforms aimed at geographic and programmatic targeting of services, decentralization of planning and decision-making processes, and integration of MCH service delivery.
- (b) Ensuring the sustainability of services through policy reforms aimed at creation of consumer demand, strengthening of government commitment, and public and private sector health financing initiatives.

1. Targeting of Child Survival Services (COPR I.A.) and Decentralization (COPR I.C)

The CSP identified the following policy objectives relative to targeting and decentralization of child survival services:

- Determination of priority underserved provinces
- Determination of functional (programmatic) priorities for additional services and programs
- Linkage of budget allocations to these identified priority areas and programs
- Decentralization of health planning to the regional and provincial levels.

Geographical prioritization was measured by the development, by the DOH, of a list of priority provinces and cities, based on the twin criteria of high infant, child and maternal mortality and a low level of MCH services (benchmark I.A.1). The DOH developed such a list in a timely manner, identifying 27 priority provinces and 27 priority cities in November 1989. This initial ranking exercise, based on the information available at the time, provided a useful starting point for the phasing in of other subsequent activities. It was also a valuable exercise in thinking in prioritized terms, using objective criteria to focus attention on a needier subset of the whole as the basis for future decision making and resource allocations. The subsequent development of area/program based planning (see below) built upon and reinforced this skill, requiring DOH managers from the municipal level up to the Central Office to identify and prioritize specific geographical areas utilizing the information provided through the plans.

Area/Program-Based Health Planning (APBHP) is a methodology developed by the Philippine DOH in the late 1980's and first field-tested in Quezon province in 1989. Under the CSP, the APBHP was introduced nationwide. The APBHP is a decentralized, bottom-up process in which all levels of health care providers participate in assessment of needs and constraints by geographical unit (area) and by priority program. The assessment is structured so as to analyze performance or lack of performance and identify causative factors within the control of DOH, their solution, and the resources required to implement those solutions. The process begins at the farthest periphery and then cascades upward with each ascending level consolidating the information it receives from multiple smaller geographical units below it. Midwives in the Barangay Health Stations -- previously never involved in health planning -- initiate the process through written plans assessing the performance of the barangay, the problems constraining performance, and the causes of these problems, as understood by the front-line worker. The plans prepared by the Barangay midwives serve as the foundation stones of the entire plan, which

is then consolidated at the RHU level into a masterplan for all barangays in the municipality, and again at the provincial level into a consolidated provincial plan. Pre-devolution, provincial plans were then reviewed by the DIRFOs and forwarded to the Central Office for final review and approval. After the DOH national level approval of these plans, the Department of Budget and Management (DBM) would provide augmentation fund allotments directly to the provinces and regions.

APBHP was introduced in a phased manner starting with the priority provinces/cities identified in performance benchmark I.A.1. Institutionalization of the planning process was sought through training of a core of trainers at the central level (benchmark I.C.3), and subsequently training the regional and provincial health managers in the APBHPs (Benchmark I.C.2). A core group of skilled DOH planners from the central office functioned as consultants in training of regional and provincial health managers in APBHP. Benchmarks I.A.3 and I.C.1. between them called for submission of provincial plans addressing child-survival priority programs and related resource requirements for the 27 priority provinces by October 1990; for 50% of total provinces by October 1991; and 100% of the provinces by October 1992.

These benchmarks were fully met in all three years -- no small feat given the immense amount of work which it entailed. The initial introduction of the APBHP methodology into a new province entailed months of intensive training and technical assistance, first to the staff of the Integrated Provincial Health Office (IPHO) and then, by them, to the staff of the RHUs and BHSes. The quality of these training efforts is reflected in the fact that only 15-20% of plans submitted in 1991 and 1992 required revision. Preparation of the plan required approximately three weeks of time at the initial, BHS level, and equivalent amounts of time at the levels of the RHU, IPHO, and Regional Offices (DIRFOs) for review and compilation of the plans done by the level below. In addition to training personnel, the DOH had to develop procedures for evaluation of the plans and train personnel at the provincial, regional and central level in same. To this end, an Evaluation Checklist was developed to serve as a standardized tool for determining whether a plan, once submitted, was of acceptable quality. Although the provincial plans improved markedly with a rapid decrease in the percentages having to be sent back to the field for revision by the time a province submitted its second consecutive plan, a significant amount of revision was required the first time around, constituting a particularly large workload for the central and regional offices at the onset of the CSP. With this understood, the DOH's successful achievement of these benchmarks -- particularly in the initial years of 1990 and 1991 -- is truly remarkable.

These plans were considerably more than a paper exercise. It was evident to the evaluation team in discussions with field level health providers in the four provinces and three cities visited that the planning process was taken very seriously from the bottom level on up, with great effort put into analyzing local health needs, identifying constraints and proposing workable solutions. Higher levels fulfilled their responsibility to support lower levels in plan development through extensive training and assistance. Midwives reported being brought to the RHU or District Hospital for classes on plan preparation and for hands-on workshops in which they wrote their plans with assistance from RHU and provincial staff as needed. The evaluation team reviewed copies of completed APBHPs in the field. The worksheets, which were well formatted, involved inclusion of very detailed information, for which solutions and costs to the priority problems were identified.

The review process at each level was conducted with serious attention to criteria and-- most importantly - the information contained in the plans was carefully studied by the reviewing officials at the next level, resulting in a vastly improved level of understanding of actual program implementation constraints. One Regional Director remarked to the team that "before APBHPs, we thought that the health workers in low-performing areas were just not doing a good job. We found to our surprise that this was not so. They were doing a good job, but they lacked things they needed. Through APBHPs we learned exactly what these problems were."

Most significantly, the plans were used in resource allocation, with a resultant impact on service delivery. Resource allocation was measured by a performance benchmark requiring that, by October 1990, increased budget appropriations be given to the priority provinces identified in the prioritization exercise which comprised benchmark I.A.1. This benchmark was met, with an allocation of 29.6 million pesos (over \$1 million US \$) to all 54 of the identified priority provinces and cities **over and above their normal annual appropriation for health**. Although there was only one benchmark for this, in 1990, the DOH continued to meet the objective of targeted resource allocation in subsequent years of the CSP, providing a total of 408 million pesos (\$16 million US\$) in augmentation funding to the provinces based on APBHP-identified needs between 1990 - 1994.

Some 80% of the total augmentation funding to the provinces was utilized for training of health care providers in the priority areas of ARI, CDD, FP, nutrition etc. Midwives and nurses from the BHSes and RHUs were trained in the management of acute respiratory infection following a standard WHO algorithm, and upon completion of that training were provided with the necessary supplies and equipment. Providers in every BHS and RHU visited had received this training, reported it to have been extremely useful, and, most importantly, were observed to be actively treating ARI cases in accordance with the protocol taught -- something never before done by providers below the level of physician. Most of the midwives and nurses interviewed had also had additional FP training, particularly in IUD insertion; at least one, and usually all, of the PHNs and RHMs per facility visited had been so trained and IUD services were found to be available as a result. These clinical trainings were described by the providers with a great deal of enthusiasm and recall. The length of training and practicums appears to have been adequate to enable providers to carry out these functions on their own thereafter.

An important feature of the CSP augmentation funds were their discretionary nature -- program managers at the various levels were not tied to specific line items as long as the use of the funds fit the general purpose of assisting in delivery of child survival services. This flexibility was sorely lacking in the other resources at the DOH's disposal; the basic GOP appropriation was locked in to fixed recurrent costs (salaries etc) and capital outlays with few degrees of freedom left over. Other donor funds followed a project mode of assistance which invariably failed to take some cost into account. CSP augmentation funds thus had a value far in excess of their peso amount: they served as the mortar with which individual resource bricks could be pasted together and gaps between them filled in.

APBHP was a powerful tool for decentralization. For the first time, in a historically top-down hierarchy, front-line workers were empowered to influence the plans for their catchment areas and to communicate their needs and problems up through the system.

The evaluation team found numerous examples where the APBHP led to identification and resolution of factors impeding service delivery, with a resultant improvement in service delivery. For example, in Cebu Province, APBHPs revealed that the reason for a low 19% immunization coverage in one municipality was an inaccessible island barangay. After an adjustment was made in the midwife's travel allowance, immunization performance improved dramatically.

In the economically depressed province of Albay, Bicol region, provincial health staff recalled that through the APBHPs "we could learn the problems from the midwives, and how to solve them." Deficiencies identified in the Albay APBHPs included lack of equipment and dysfunctional RHUs and BHSes. Augmentation funds were used to physically restore and equip RHUs and BHSes and train midwives and nurses in CARI, FP and CDD. The plans also facilitated supervision by highlighting areas of strong and weak performance. The province instituted a quarterly ranking of midwives by program component, with special recognition accorded to the highest performing barangay in each of nine program areas per quarter, and managers accelerated supervisory visits to those barangays which lagged behind. Over the period 1988-1994 Albay recorded a 20 percentage point rise in both child and maternal immunization coverage, a reduction in reported deaths from neonatal tetanus from an average

of 10 deaths per year to zero from 1991 onward, a 33% reduction in infant deaths from pneumonia, and a 50% overall drop in infant mortality from all causes.

In Lapu-Lapu City, a high mortality, low performing area at the start of the CSP (and included for that reason in the DOH's initial ranking of priority cities/provinces), the City Health Officer attributes a dramatic increase in child survival program performance (with a corresponding decrease in mortality) largely to the APBHP process. With an IMR of 76.7%* in 1988, Lapu-Lapu ranked as one of the five highest IMR cities/provinces nationwide and received additional child survival resources in response to needs identified through the APBHP annually from 1990 - 1994. During this time, Lapu-Lapu raised its immunization coverage rate for children from 33.6% to 98.7%*. APBHP identified a need to switch from passive registration to active follow-up of all target children in the barangays (an action made possible by the Target Client List developed under CSP as part of the FHSIS; this is described further under the COPR D: Integration of MCH Services). Tetanus toxoid coverage in mothers rose over the same period, from only 25% in 1988 (during which year five neonatal tetanus deaths were recorded in the city) to 87% in 1994; there have been no recorded neonatal tetanus deaths there since 1990 onward. The 1991 APBHP identified an unusually high incidence of diarrhea on the island barangay of Caucaubain in Lapu-Lapu and low local knowledge of diarrheal prevention and management. As a direct result, a rural midwife was posted to this previously underserved area and health indicators improved. In 1993, a total of 4,166 live births and 121 infant deaths were recorded in Lapu-Lapu, for an IMR of 29*.

The midwife in Barangay Gabi, in Cordova, Cebu reports receipt of a pump boat to facilitate access to an island barangay served by her BHS as a consequence of completing the APBHP. In the same municipality, which has continued to do the plans post-devolution, the planning process highlighted low performance in tuberculosis case-finding and its cause: a medical technician previously shared with another municipality had devolved to the other municipality, leaving Cordova with none. Once recognized, the problem was resolved through the two respective mayors who arranged for the technician to spend one day a week in Cordova under a cost-sharing arrangement.

Another positive impact of the APBHPs were that they led municipal and provincial health officers to analyze maternal child health needs and the relationships between leading causes of mortality and the presence/absence of preventive services. MHOs and PHOs are physicians with often little or no public health training; basic physician education in the Philippines is curative in orientation. The plans proved an effective tool for raising their awareness of the value of preventive health care.

The APBHP process was on the verge of institutionalization when the Philippine Health Care System underwent an abrupt and unanticipated transformation following transfer of authority for health services from the central government to the provinces and municipalities. This devolution, mandated by the Local Government Code of 1991 and fully implemented in 1993, pre-empted what had been a steady movement towards decentralization by the DOH. DOH efforts, supported through the CSP, aimed at a decentralization of planning and resource allocation to the provincial level within the framework of a national health system. Considerable progress was being made in this direction through APBHP.

The LGC served to abruptly move field health services out of the administrative confines of the DOH altogether, and down to a very small level -- the municipality, a unit with population sizes as small as 3,000 - 4,000. The radical nature of this move is illustrated by the fact that the evaluation team, in its collective knowledge, is unaware of a single instance in other countries wherein health services were devolved below the equivalent of the provincial level. Further, the move was unanticipated within the DOH and outside its sphere of control.

*Source: HIS, DOH

The smaller LGUs, in particular, were ill prepared to assume the responsibility for health services while the DOH, on its part, was and to a significant extent remains ill-equipped to implement the responsibilities defined for it by the parameters of the LGC: setting national health goals and priorities and orchestrating progress towards same through regulatory, monitoring and technical support activities in the absence of direct line authority. The new DOH role calls heavily upon skills in policy formulation and implementation, advocacy, persuasion and negotiation, standard setting and enforcement, monitoring and evaluation (including a sophisticated use of information to influence decision-making within and outside the Department). However, the DOH's focus has historically been on actual implementation, with other functions relatively under-developed and poorly understood.

Further, policy formulation, legislative and regulatory activities of the DOH are carried out largely by the Office of the Chief of Staff in relative isolation from the mainstream technical bureaucracy, which focuses instead on implementation and resolution of implementation problems through its chain of command extending to the periphery of the delivery system. Post-devolution, the DOH technocrats remain the locus of expertise in identifying technical needs, priorities and problems for the nation, but are unable to achieve technical ends through direct implementation and lack both familiarity with and access to alternate means.

The DOH technical offices already have the necessary skills and expertise to provide technical assistance and support to the (now devolved) implementing agencies. Indeed, the outstandingly high level of human resources in the Philippine health system is one of its most striking features. However, lines of technical support within the DOH historically followed lines of authority and the two are perceived by both retained and devolved DOH staff as inseparable. As a result, **the loss of line authority between and among the DOH and the devolved health personnel has been accompanied by a loss of functional linkages as well.** The absence of functional, technical linkages between the DOH and devolved staff at the provincial, municipal and barangay levels was striking during the team's field visits. There was a corresponding absence between devolved agencies, eg: between provincial and municipal health staff. This in turn has led to the disruption and fragmentation of the entire health system, inclusive of the various achievements under the CSP.

In the case of APBHP this is evidenced by an abandonment of the entire process, to the detriment of health planning and service delivery. This is particularly unfortunate since APBHP has the potential to address several significant weaknesses in the implementation of devolution, as will be discussed further in Section D: Sustainability of Achievements.

The abandonment of the APBHP mechanism post-devolution does not appear to have been a conscious decision on anyone's part but rather to have occurred in the wake of general confusion and lack of direction. DIRFOs stopped requesting plans from the IPHOs because they felt they no longer had authority to do so; IPHOs in turn did not request them from the RHUs. When providers at the RHU and BHS level were questioned about lack of plans for 1994 and 1995, they responded that they had not been told to do them. The instruction had always come from above; only a few took the initiative of continuing to use the methodology in requesting resources from the LGU. Although DOH documents indicate an intention to vigorously promote APBHP to the LGUs, this did not and is not happening.

In fact, the team noted even such low key activities as provision of technical materials and support (eg: IEC materials, record keeping forms) to the municipalities to be infrequent on the part of both the DOH and the provincial health personnel. There is a general perception at the regional and provincial level that, as several staff put it, "we have nothing to do with the LGUs" or "we can only assist them if they request it". For their part, health personnel at the municipal and barangay level feel abandoned and are at a loss to obtain needed technical support since it is not clear to them that a technical linkage still remains with the DOH. In a few cases where technical support was observed, it was handled by both sides as a somewhat clandestine operation -- the favored mechanism for which is the utilization of the

small (but strategically placed) number of DOH personnel retained at district and municipal levels in order to provide DOH representation on Local Health Boards.

In only one of the four provincial offices and none of the three regional offices were technical linkages being effectively maintained with devolved health facilities and personnel. The one exception resulted from initiatives taken by the provincial health staff on their own, bolstered by an unusually high degree of acknowledged technical expertise and a very adroit PHO with unusually good interpersonal skills. Most PHOs and DIRFOs, however, felt that they could not take the initiative in establishing new types of interactions without a clear directive to do so. Regional offices expressly felt frustrated by the lack of direction from the Central Office/DOH. Provincial offices lacked anyone to expect direction from, and were clearly at a loss.

With respect to APBHP, the result is that municipal health staff find themselves alone with the responsibility for health planning, budgeting and the daunting task of seeking appropriate resources from LGU politicians. MHOs vary widely in the extent to which their training and experience prepares them for this task. Some are recent medical graduates with no formal training in either public health or health care administration; some have advanced degrees in Public Health and extensive field experience. The former outnumber the latter and the majority fall somewhere in between.

Out of four RHUs visited, the MHOs in one has independently taken the initiative to continue APBHP and was utilizing it both as a basis for planning activities and as a springboard for the budget requests to the LGU. However, these plans were not with the province, constraining its ability to obtain needed DOH inputs since it is the province which enters into resource sharing agreements with the DOH on the part of all its municipalities. When asked about this, the MHO stated that there was no reason to send their plans to the province since "we are already devolved from them" and indicated they were unaware of the provincial-DOH agreements and not involved in their preparation. The other three RHUs had taken no initiative with respect to health planning but rather waited for instructions from the LGU; in two cases this led to the annual preparation of simple "action plans" with no input from the barangays, and in one case this resulted in no planning or involvement in requesting resources whatsoever. Of two cities visited, one had continued the APBHP on the initiative of the CHO, who used it to defend his budget requests to the Sanggunian (local legislature), while the other had stopped because the LGU did not request it. There was a correlation between education and experience of the MHO and taking the initiative to continue APBHP in the absence of a supervisory order to do so; in both cases where the APBHP continued, the MHOs were highly experienced, articulate physicians with Masters degrees in Public Health. The average MHO lacks the skills and confidence to take on such an initiative without some sort of external technical guidance.

2. Integration Of Child Survival Activities (COPR I.D)

There were seven policy objectives identified by the CSP relative to the policy reform of "integration of child survival services" (category of policy reform I.D):

- Development of implementation arrangements for population activities outlined in the June 1989 "Integrated Population and Development Program Plan."
- Development of a national strategy to address nutritional problems.
- Integrated delivery of child survival-related services at the provincial level.
- Integrated health information reporting at the local and national levels.
- Coordination of child survival-related programs at the national level.

- Full implementation of program-based budgeting system at provincial, regional and national levels.
- Participation of other GOP agencies providing child survival related services in the development of integrated provincial health plans.

In relation to population, an implementation plan for the National Family Planning Program was completed by October (benchmark I.D.1). By 1991 the necessary inputs for delivery of FP services as an integrated part of field level MCH care were being put in place. By 1992, a full range of FP services had been thoroughly integrated into the routine activities of most BHSes and virtually all RHUs.

In 1991 the DOH completed a document entitled "Comprehensive Nutrition Program 1992-1996". It was submitted to the DOH Executive Committee by the Nutrition Service, and approved for implementation. In the years since then, most of the planned activities have been initiated, including a mapping out of goiter endemic areas to permit, for the first time, appropriate targeting of these with iodine supplementation. Vitamin A Capsule distribution has been integrated in to EPI activities, eg: on National Immunization Days (NID).

Three interrelated benchmarks were established for the policy objective of "Integrated delivery of child survival-related activities at the provincial level": Completion and distribution of an integrated MCH operations guide (I.D.4); distribution of the guide (I.D.5) and training of provincial health workers in the approach (I.D.3).

A manual on integration of MCH activities was completed in December 1990. A signed distribution list of either Provincial Health Officers or Assistant Regional Directors is on file at PCU indicating receipt of the manuals for distribution to MHOs. Additional documentation on file indicates that orientation workshops were conducted when the manuals were distributed to provincial and regional staff. Also on file are a training syllabus and training report on the number and type of provincial health workers trained, indicating that by 1993 a total of 10557 physicians, 1114 nurses, 2801 midwives and 263 belonging to other staff categories were trained in the integrated delivery of MCH services in a series of two day workshops.

Although these three benchmarks on development of an integrated MCH manual and training in its use were met, they appear to have been limited in effect. The evaluation team was unable to find a copy of the manual in any of the 9 field health facilities and 6 regional/provincial health offices visited, and questions about integration seemed to draw a blank. Regional and provincial program managers had at best very hazy recollection of the training and staff below the provincial level did not remember any training or orientation on the subject.

A review of the Integrated MCH effort undertaken by the DOH with its own resources in 1994 found that, of 144 randomly selected provincial health personnel, over 80% had been trained or oriented on the "new concept of integration as described in the manual", but only 38% were able to clearly express the new integration concept. It was apparent that training had been conducted but the trainees had not fully comprehended the concepts taught.

This stands in contrast to other DOH trainings conducted over the course of the CSP (CARI, CDD, basic and comprehensive FP etc), which were well received and recollected by participants. Field staff took pride in describing and demonstrating to the team expanded skills gained as a result of those trainings and could readily describe the content.

The training/orientation process was hampered by difficulty in working with the manual, primarily because it attempted to address a too diverse audience with different needs — program coordinators at central, regional and provincial levels who are accustomed to a vertical program focus on the one hand, and the nurses and midwives who already deliver the full package of services to clients, on the other.

The obstacles to integration of services as observed in the course of this evaluation were less ones of theoretical knowledge than of practical constraints. Nurses and midwives have a very good understanding of the linkages between the different MCH interventions, derived from their own firsthand experience with clients and the fact that they work alone providing all services, often (of practical necessity) in the course of a single client visit. Midwives reported that they had been providing integrated services even back in the days when they were officially supposed to set aside specific days for specific programs, since as one midwife put it: "there's no way I could control on what day the clients came in or what they asked for when they came".

Program coordinators at the provincial level and above, by contrast, work on isolated aspects of MCH without direct client contact. This facilitates accountability for specific aspects of program performance, but also lends itself to tunnel vision and an overlooking of synergistic effects and linkages despite a good theoretical awareness of these.

The new Field Health Service Information System (FHSIS), operational in all provinces by 1990 (benchmarks I.D.7, I.D.8), replaced a cumbersome and fragmented reporting system which required midwives to submit separate reports for each vertical program. The new system, developed with initial technical assistance from WHO and subsequent assistance from MSH, and extensively field-tested, begins with maintenance of a single ledger by the midwives which incorporates lists of all target beneficiaries and all relevant program interventions. This book, the "target client list" (TCL) assists the midwife in organizing her work, identifying and following up on missed clients, and assessing her own performance in all of the priority programs. A single reporting form (RF) requiring tick marks for services provided is filled out, either by marking it at the time of service or copying information later from the TCL, and submitted monthly to the RHU for batching and validation by the PHN. The RHU in turn submits the RFs to the province where the data are entered onto computer and processed using specially designed software. From the province, the data go to the Region for further consolidation and processing, and from there to the Central Office.

At the BHS and RHU level, the system was a welcome and time-saving change and readily implemented. The Target Client List, the foundation of the system, is very popular with midwives and credited with simplifying record keeping while also serving as an organizing and self-monitoring tool. Containing a census of the target population throughout the barangay, the TCL facilitates active follow-up of mothers and children. All information on child survival and maternal care is contained in the single book, replacing what had been multiple ledgers by vertical program. The FHSIS monthly reporting forms (RFs) are simple, easy-to-use tally sheets which can be ticked off at the time of client contact, or subsequently from the log entry. Prior to the FHSIS, every vertical program had a separate different form to be filled out by the midwife, a time-consuming effort which failed to capture the MCH services as a whole.

Some difficulties were encountered at the Provincial level as the system required computerized compilation at a level in the health care system which was largely uncomputerized. Delays were encountered in putting into place the needed hardware and personnel. Likewise, the Health Information Service at the central DOH offices required upgrading. This was done, although, at the provincial level, the presence of computers in an otherwise uncomputerized setting remained somewhat problematic.

The FHSIS remains in place post-devolution and was noted to be in use at every BHS, RHU and CHO visited. However, the flow of reporting beyond the RHU stopped in 1993 as part of an organized protest against devolution by the Association of Municipal Health Officers of the Philippines (AMHOP), an

impasse yet to be resolved. The main effect of this boycott has been to seriously impede the DOH's already less than optimal ability to monitor programs, assess health status and program impact, and formulate appropriate policies and strategies. This is no small problem given that these are now the chief means at the DOH's disposal in providing health sector leadership.

The DOH leadership is attempting through various means to facilitate a resolution of some of the issues which underlie the AMHOP information boycott. This is apt to be a long process as the issues entail substantial resource implications relating to salaries and benefits of devolved personnel. In the meantime, the DOH is seriously hampered by lack of data on health service performance and utilization over the past two years. Reflective of the lack of clarity in roles and relationships which prevails, there has been no organized response by the DOH to the breakdown in the flow of information. Rather, ad hoc actions have been taken by various services, regional offices, and in some cases, provincial offices. These generally take the form of trying to circumvent the problem through a direct implementary response, eg: conduct of cluster surveys by the DOH itself to make up for gaps in information, and use of retained DOH personnel to try to extract the needed data from the RHUs.

It should be noted that under the Local Government Code, LGUs are required to submit health data to the DOH and the DOH has the authority to determine what health reports are necessary. The ultimate responsibility for compliance with this is the LCE, to whom the MHO now reports. However, only one of the three regions visited had approached municipal mayors for assistance in obtaining the reports (with success in most instances). The other regions felt hesitant to communicate with LCEs on this issue without explicit instructions from the DOH central office. Confusion and uncertainty over appropriate roles and relationships post-devolution has tended to result in an absence of relationship altogether -- leaving little scope for problem resolution.

An additional tool for integration developed during the CSP, although not required as a benchmark, was the development of an Integrated Supervisory Checklist (ISC). The ISC, developed with assistance from the MSH TAT Resident Advisor for Programs and Evaluation, is a simple tool identifying specific areas and criteria to be used in conducting supervisory visits to field health facilities. The areas to be examined are clearly listed and relate to the key MCH interventions, included in an integrated manner on the checklist. Specific definitions and criteria are provided to the rater and both quantitative and qualitative aspects of service delivery are assessed. The ISC aims at transparency, with a copy kept at the facility so that personnel know the criteria against which their performance will be measured, and are aware of the ratings they have received. Prior to development of the ISC, supervision of midwives by PHNs, and PHNs by MHOs, was carried out in an ad hoc manner with a log book utilized for recording the supervisor's comments but no clear set of criteria in use. Supervisory visits by provincial, regional and central office program staff utilized various checklists but these were specific to vertical programs, with the supervisory visits by program staff limited in focus to one or two program areas per visit rather than assessing MCH service delivery as a whole.

The ISC was implemented nationwide. For the provincial level and above, it served as an integrating tool by requiring staff of vertical programs to examine total MCH performance rather than a particular program in isolation. This also strengthened supervision by making maximal use of each visit to an RHU or BHS by technical staff from the provinces, regions and central office. At the RHU/BHS interface, integration was already present (same supervisor, same employee for all the program areas) but the ISC strengthened supervision by making it clear to supervisors what should be assessed and how.

The establishment of clear criteria was cited by PHNs and RHMs in the field as the greatest contribution of the ISC. However, many staff interviewed expressed the feeling that its use as designed in direct PHN-RHM interactions was culturally difficult; the checklist is seen as "cold" and "impersonal", particularly a problem in relationships involving frequent regular contact over extended periods of time. PHNs and RHMs are part of the same "family", making checklist ratings more awkward than when used by a visiting

supervisor from afar. PHNs have found various ways of dealing with this. Some use the narrative log book at the BHS to record appraisals and guidance for the midwife (a warmer, chattier medium) in addition to the ISC. Some use only the log book at the BHS, but then separately fill out an ISC once back at the RHU, having jotted down notes to themselves on scrap paper during the visit.

Post-devolution, staff from the IPHO and DOH no longer use the ISC, understandably since it was designed for use in the context of line supervision and is not an appropriate tool for monitoring between the DOH and devolved agencies. Unfortunately, it has yet to be replaced by other monitoring and technical guidance tools. It was observed that the DOH (regional, central) and IPHO staff had not changed their mode of interaction with RHU/BHS staff to reflect new relationships so much as stopped interacting altogether. Considerable confusion was expressed to the team by IPHO and DOH staff as to what it might be like to relate in the absence of line authority, along with frustration at the lack of guidance coming from the central office in this regard. For their part, RHU and BHS staff expressed a sense of abandonment by the technical staff of the IPHOs and DIRFOs.

Within the municipal level, where the old line of authority from MHO-PHN-RHM remains unchanged, the ISC continues to be occasionally used but less so than pre-devolution. Reasons cited include running out of forms, with no sense of where/how more might be obtained (reflective of the general field perception that devolution means a total severance of linkage with the DOH) and budget constraints limiting funds for supervisory travel. However, the primary reason for its disuse appears to be that the direction for technical supervision which had previously been received from higher levels in the system is now absent. The majority of RHUs have responded to devolution by awaiting direction from the LGU in the same manner that they had previously awaited and responded to direction from the DOH hierarchy. However, LCEs cannot possibly be expected to provide technical programmatic guidance along with their exercise of line authority. The result is a vacuum in technical supervision, leaving municipal health workers to their own devices in determining how to carry out their tasks. This creates the greatest problems in those areas where field health staff were weakest and least comfortable. Hence, clinical service delivery is little altered but planning, supervisory and management aspects of field health services are significantly affected.

In addition to programmatic fragmentation among the various MCH services, the CSP addressed a disassociation between programs and the budgeting process. Integration of these functions was reflected in a policy objective of instituting program plan-based budgeting at provincial, regional and national levels. The DOH developed a reference manual for use in program plan-based budgeting and trained personnel at central, regional and provincial levels in its use (benchmark I.D.9). From 1992 onward, the DOH annual budget was prepared in accordance with the new system. Previously, an incremental approach was used whereby current years' budget requirements were arrived at by increasing the previous year's budget by a certain percentage. The successful linkage of program plans to budgets improved the correspondence between planned activities and resource availability.

The program plan-based budgeting system remains in use throughout the DOH. However, with devolution, budgets for field health services are now prepared by LGUs. It was noted that in most instances, this had led to a reversion to the incremental approach and little linkage between budgets and program plans -- if indeed there is any program planning taking place.

Coordination of child survival-related programs at the national level was measured by a CSP benchmark (I.D.9) for designation of a DOH official at assistant Secretary level for the coordination of all GOP and foreign-assisted child survival-related activities. On October 4, 1990, the DOH Undersecretary and Chief of Staff, Mario Taguiwalo, was designated as the CSP program Director and Dr. Consuelo Aranas was designated as the CSP program Coordinator. Dr. Aranas was also the coordinator of the Program Coordinating Unit (PCU), a body which simultaneously coordinates the World Bank's Philippine Health Development program (PHDP) implementation. This served to unite management of the two largest

donor funded child survival programs. Coordination was further enhanced by the programmed coordination with all other agencies involved with child survival, a provision in the same Department Order, designating 26 other DOH staff as Implementation Managers for DOH component/subcomponents (e.g. the MCH component with the EPI, CDD, MC/U5 and CARI subcomponents) plus other support activity staff for the child survival related activities.

3. Government Commitment (Category of Policy Reform II.A)

The program matrix identifies three policy objectives with respect to government commitment to child survival:

- demonstrated commitment to increasing DOH technical capability
- budgetary provision of funds for child survival activities
- institutionalization of the AID-funded Field Epidemiology Training Program

DOH commitment to increasing its capacity in HIS, epidemiology-based planning, IEC and health care financing was measured by DOH signature on a PIO/T for AID direct financing of a team of resident technical advisors out of CSP resources (benchmark II.A.1). This was done in December 1989, with \$5 million of the total project funding allocated through a direct AID contract with Management Sciences for Health (MSH). MSH provided four advisors initially, with expertise in HIS, IEC, epidemiology/health planning and health care financing. A fifth advisor with expertise in programs and evaluation was added in 1991 as it became apparent that assistance was needed in refining service delivery indicators and tracking progress towards service targets.

The DOH provided the Technical Assistance Team (TAT) with office space within the DOH and worked closely with them throughout the team's three year stay. One of the advisors continued with the DOH as part of the USAID-funded Health Finance Development Project, an outgrowth of the CSP activities related to financial sustainability. The TAT faced some initial difficulty in adjusting their roles and work styles to a program, rather than project, mode of assistance. With active assistance from USAID, these problems were resolved early on allowing the TAT to make substantial contributions to the DOH's achievement of the various policy objectives.

The Scope of Work for the TAT emphasized the provision of supportive inputs to "enhance the performance of the DOH in achieving the Child Survival program objectives". It should be noted that this is a fundamentally different task than the development of institutional capabilities. DOH managers interviewed were uniformly of the opinion that the TA provided had been of value in the achievement of the performance benchmarks. Specific contributions of the team towards achievement of CSP benchmarks included assistance with development of the FHSIS and related training materials and management systems; facilitation of the APBHP process; revision and clarification of the end-of-project service delivery indicators; and development of an IEC strategy.

In addition, the DOH utilized the technical expertise of the TAT advisors in a number of other areas pertinent to child survival: the health planning advisor was heavily consulted with respect to the re-introduction of DMPA into the national family planning program, and the programs and evaluation advisor helped the DOH expand its nutrition interventions to include a specific focus on key micronutrient deficiencies.

Budgetary support for child survival activities was measured through annual advices of allotment for planned child survival activities (benchmark II.A.2). This benchmark was fully met in all three years, through the allocation by the GOP of steadily increasing resources for field health services plus child survival augmentation funds over and above this basic appropriation. Between 1990 - 1993, 1.35 billion pesos were allocated in augmentation funds -- the equivalent of approximately \$54 million in US

currency, or greater than the total USAID assistance provided. These augmentation funds did not replace funds that would otherwise have been routinely allocated to the DOH; on the contrary, the DOH's basic appropriation increased over the same time period, both in total and in the amount specifically allocated to field health services:

Table 2:
GOP Budgetary Allocations to the DOH
(in billion pesos)

<u>Year</u>	<u>Basic Appropriation</u>		<u>Augmentation Funds</u>
	DOH	Field Health Svcs*	
1989	6.6	2.2	-0-
1990	7.3	2.6	.199
1991	7.1	2.9	.372
1992	10.2	3.5	.372

* a subset of the larger total DOH amount.

In 1993, an additional .412 billion pesos of augmentation funds were released. However, data on the basic appropriation for health is not readily available for that year since, under devolution, field health services were supported by LGUs out of a single multi-sectoral appropriation (IRA) made to them.

Of the augmentation funding provided, over one-fourth was directly allocated to the provinces in support of needs identified through the APBHPs. The most common uses made of these funds at the provincial level were: training of health personnel, supervisory travel costs, outreach service costs (travel by midwives to "satellite" Barangays), equipment and supplies.

Three-quarters of the total augmentation funds provided were utilized by the DOH in support of nationwide child survival activities such as development and implementation of training in CARI, FP, CDD; procurement of drugs for the CARI, CDD and maternal care initiatives; HIS-related hardware, software, training and forms; and the Field Epidemiology Training Program and establishment of Regional Epidemiologic Surveillance Units.

In the two years that have passed since the completion of USAID disbursements under the CSP, the team notes that the GOP has absorbed the following costs as regular budget items: the RESUs, CARI drugs, CDD drugs (ORESOL), micronutrient supplementation (VAC, iron, iodine). The GOP has, in addition, secured approximately \$421 million in external assistance for child-survival related activities over the five year period 1995-1999, three-quarters of this from donors other than USAID.

A third policy objective related to Government Commitment, institutionalization of the AID-funded Field Epidemiology Training Program, was measured by a formal revision to the DOH organizational structure incorporating FETP as a division with permanent positions and budget (benchmark II.A.3). This was done through an Administrative Order issued in October 1992. FETP is now a division within the Office of Public Health Services. In addition, within each Regional Office there is a Regional Epidemiological Surveillance Unit (RESU) staffed by an FETP trained physician-epidemiologist, a sentinel nurse, and a sentinel clerk. These positions have been permanently absorbed by the GOP in every region. The FETP, a two year intensive training in epidemiology, continues and its graduates are being utilized appropriately in the 15 RESUs and elsewhere. Of 35 total graduates to date, only one has left the Philippines; the remaining 34 are still in country and in government service. Several FETP graduates have been invited

to present papers at international fora, indicative of the high quality work being done. Notable epidemiological studies have included work on cholera outbreaks, malaria, and IV drug use.

While FETP has been effectively institutionalized and is yielding work of high caliber, a few issues remain to be resolved. One is the degree status of its graduates. The FETP is a rigorous, two year post-graduate training program in epidemiology. Graduates receive a certificate of completion but no formal academic degree. This in turn presents a barrier to their effective utilization since Civil Service

regulations require a Masters Degree in Public Health (or related specialty) for appointments to the higher ranks of Medical Specialist. The DOH is exploring means of resolving this through possible issuance of an academic degree in collaboration with the University of the Philippines.

An additional issue with respect to the FETP is the utilization of epidemiologic data in decision-making and policy formulation. Information-gathering and analysis functions within the central office of the DOH are somewhat fragmented at present with responsibilities spread across different offices and services, and poorly coordinated. A great deal of ad hoc information collection is undertaken by different services and divisions that could be reduced through better, more coordinated use of information already existing elsewhere within the DOH. There is poor dissemination of information which in turn limits the use of it. In addition, the capabilities of technical staff in analysis and use of data need strengthening. This problem extends to all types of health information: service statistics, survey data, epidemiologic surveillance data. Considerable difficulty was encountered, for example, by the evaluation team in locating the sources of baseline data and 1993 follow-up data for the nine CSP service delivery indicators; when finally located, technical weaknesses in the data often prevented their use by the team in assessing program performance.

This is of particular concern now since, in the post-devolution context, on-going monitoring and evaluation is one of the DOH's most vital functions, and the skilful analysis and use of information one of its greatest tools for influencing programs and policy.

4. Internalizing the Demand For Preventive Health Services (COPR II.B)

The CSP included two policy objectives relative to "internalizing the demand for preventive health services" - the second "sustainability" policy reform category:

- Development and implementation of a plan to increase consumer demand for preventive health services.
- Development of a strategy for internalizing promotive/preventive health behaviors.

The objective for development of an IEC plan was met through completion by the DOH in December 1990 (benchmark II.B.1) of the DOH's Public Information Health Education Service (PIHES) Priorities, Tasks and Implementing Guidelines, containing discussion on the IEC priorities for CSP as they interrelate with other IEC requirements over a 2 year period. These were approved by the DOH Executive Committee (Ex-COM). Benchmark II.B.2, making the IE&C plan operational, was met in 1991 as evidenced by the plan itself and a DOH implementation status report and proof of allotment of funds.

Addressing consumer-sided health promotion activities, a Behavior Change Benchmark workshop was held in July 1992, where the most important behaviors of both providers and clients of health were identified for CARI, CDD, EPI, BF, Weaning and FP, along with strategies to promote these behaviors. This was followed by a DOH study entitled "Progress Towards Meeting DOH's targets for Internalizing Health Promotive and Disease Preventive Behaviors: An Analytical Report", which indicates that an effective strategy was in place (benchmark II.B.3). The USAID Mission Review of 1992 benchmarks

noted that "The preparation of this analytical report has enabled the DOH to realize that by focusing on meeting the needs of mothers and children rather than focusing exclusively on meeting program targets, it can expect to achieve its behavioral change objectives sooner and more efficiently." Health promotive and disease preventive behaviors such as breastfeeding, control of diarrheas, smaller family size, prevention of ARIs and complete immunizations were part of the coordinated strategy which the DOH had adopted and was pursuing.

More recently, the PIHES completed an IEC Kit for midwives, called Midwives' Integrated Communication Aid for Maternal Child Health (MICAMCH). It is a large flip chart with stand and includes a sturdy carry bag. The flip chart is well made of sturdy plasticized paper, with cogent pictures and messages to be used for face to face encounters -- the pictures for the client are on the side facing the client, with the message for the health worker to reiterate and discuss on the reverse side facing the provider. Subjects covered are pre-natal and post-natal/health care for child bearing age; well child health care; and sick child-home management of children's common illnesses. However, completed post-devolution, the tool was delivered to the various field health facilities without explanation or training due to the previously cited breakdown in technical linkages and interaction between the DOH and devolved agencies. Technical concerns aside, this resulted in most facilities being unable to set the flip-chart up as instructions for setting up the stand were not included, a difficult process which also stumped the evaluation team when attempted.

IEC materials were evident in all four provinces visited by the evaluation team, at every health facility -- whether a hospital, RHU or a rural barangay health station. The level of use and state of repair varied widely, in conformance with the overall level of performance of the facilities. Well-run facilities had prominently displayed, well cared for materials and actively promoted client attention to the materials. Less well performing facilities tended to relegate IEC materials to dusty shelves, not repair torn posters, etc. Health message pamphlets were in short supply in some areas, prompting staff to request clients not to remove them from the facility (!) There was general confusion as to where/how to go about obtaining additional IEC materials symptomatic of the general breakdown in functional linkages between the DOH and devolved levels post-devolution.

The general public and clients at health facilities report seeing and hearing a flood of TV and radio ads on maternal health topics in the last few years. Most commonly heard were messages on ORT, FP and EPI. Of women surveyed in the 1993 DHS, half reported exposure to a family planning message on the radio or TV in the month preceding the survey. Interestingly, a full 86% of the women respondents stated they found it acceptable to provide family planning information over the radio and TV (1993 DHS).

5. Financial Sustainability (COPR II.C) and Increased Private Sector Involvement (COPR II.D)

In response to the need to address the constraint of limited public sector resources for child survival, the CSP matrix included a number of policy objectives aimed at cost containment, revenue generation, and increased cost-sharing between the public and private sector. These included:

- Enhancement of the Medicare system
- Development of a health care financing strategy
- Development of a cost containment strategy
- Improved cost recovery in DOH facilities
- Privatization of four specialty hospitals
- Establishment of DOH-NGO partnerships in the provision of basic health services
- Expansion of private sector participation in (a) health planning, and (b) provision of health services
- HMO development
- Privatization of DOH services

The pioneering studies and strategies developed in relation to the above objectives led to enhanced GOP interest in the problem of health care financing to such a extent that an additional bilateral USAID project for Health Care Financing alone was developed and approved in 1991. Much of the CSP-started work, as well as the health financing component of the TAT, then "spun off" from CSP to be continued under the Health Finance Development Project (HFDP; 492-0446), which is still ongoing. CSP is credited with clarifying, focusing and sharpening GOP efforts in health financing and proved the springboard for longer term efforts.

Studies on: a) the policy, regulatory, and legislative framework for health services privatization and b) the feasibility and cost/benefits of privatization of four specialty hospitals were originally undertaken with the expectation that privatization of all or some of these four facilities would follow (benchmark II.D.1). However, the study revealed that these hospitals were in fact already effectively privatized in management and turning a net profit.

Further, the lands on which they were constructed were given as a grant and could not be resold by the Government, and the facilities performed a number of functions (training, research, treatment of the indigent etc) for the DOH which would be hard to protect if they were fully privatized. After exhaustive research the DOH recommended against privatization. However, in the process, a highly useful policy framework called the Management Ownership Matrix was developed and has been utilized in subsequent policy debates on privatization. As a framework, the MOM allows one to "locate" a hospital institution along a spectrum from fully public to fully private. Work being done under the HFDP continues to utilize this model.

The DOH prepared a concept paper which included national health insurance development as well as other components of health financing (benchmark II.C.4) in 1990. This then served as the basis for the USAID funded Health Finance Development Project. This work also contributed to the recent passage in 1995 of a National Health Insurance Act designed to address flaws in the Medicare system.

A computer-based financial model was developed by the DOH to identify cost components and estimate financial requirements needed for the implementation of child survival activities for the next 10 years (benchmark II.C.5). An in-depth examination of the financial resources available and potential fund resources that may support CSP was also developed. This methodology, in turn, facilitated the subsequent development by the DOH of a 10 year health sector investment plan.

The DOH Office of Hospital Facilities, Standards and Regulations obtained external technical assistance in conducting a analysis of the financial reports of selected hospitals in Region 3 to generate inputs on existing cost containment activities and possibly cost co ntainment activities in 1991 (benchmark II.C.6). Also in 1991, the DOH completed an analysis of a) existing user-fee and cost sharing experiences in selected facilities and services b) potential of user fees to cover DOH recurrent costs; and c) recommendations for strengthening user fee retention system (benchmark II.C.7). A series of interviews and meetings with senior staff and officials at the DOH were then carried out to discuss the study and its identified policy areas and possible demonstration schemes.

The DOH Financial Service, aided by a team of outside consultants, compiled baseline data on national and local government shares in public sector health expenditures at the provincial level just prior to enactment of the Local Government Code (benchmark II.C.8).

With respect to privatization of government services and facilities, the DOH in 1991 contracted with a private supplier for purchase of hepatitis B vaccine (newly added to the EPI schedule) and delivery of same direct to the field (benchmark II.D.7). Vaccines had been purchased from private suppliers in the past, but the DOH had historically utilized its own logistics (often slow and logjammed) system to deliver supplies to the field. 1991 also marked the start of active utilization of private sector capabilities in IEC,

with issuance of 7 separate contracts totalling 52 million pesos to six different private firms for development of IEC materials and mass media health education campaigns (benchmark II.D.8).

Other benchmarks achieved with respect to privatization were the implementation of an NGO grant partnership effort with World Bank funding (benchmark II.D.2), involvement of private sector groups in health planning in 24 different provinces (benchmark II.D.3), and designation of the Community Health Service (CHS) as the lead DOH unit in promotion of public-private sector collaboration and development by CHS of an agenda for same (benchmark II.D).

The DOH formulated draft regulations and quality control guidelines for Health Maintenance Organizations through a consultative process involving the Securities and Exchange Commission and pertinent private sector officials. These have since been enacted into law, helping to ensure that the burgeoning HMO industry will deliver services of acceptable quality (benchmark II.D.5).

6. Increased Delivery of Child Survival Services (Category of Policy Reform I.B.)

This category of policy reform is captured by a single objective, which is that the "supply of services from DOH, NGOs and private commercial sector increases in accordance with prioritized provincial plans". Although listed as a category of policy reform and an objective, increased delivery of child survival services was in fact an expected output of successful implementation of all of the previously described policy reforms and their respective objectives.

The key measure of increased service delivery was a benchmark relating to service delivery indicator achievements to be met by December 1993 (benchmark I.B.2). Since achievement of this benchmark could not be measured until after all disbursements were completed, an additional benchmark required the setting of annual service delivery targets for all provinces prior to the release of tranches 2 (1990), 3 (1991), and 4 (1992) served as an intermediate measure of efforts to monitor progress on the service delivery indicators and ensure their achievement by the end of the project (benchmark I.B.1).

These targets were established for all provinces each year through a interactive process between the DOH central, regional and provincial offices. However, in many cases there was neither accurate baseline data nor a reliable means of estimating subsequent achievement. Provinces were given national-level baseline estimates and targets and requested to estimate their own current performance and establish their own targets in respect to these. However, even the national level figures used were in many cases rough estimates. Hence the utility of the exercise in numerical terms was limited. However, the exercise did serve to ensure that the provinces were clearly focused on the nine indicators and concomitant activities.

Nine service delivery indicators were selected. These came from pre-existing five-year directional plans, and an effort was made to limit the list to indicators of direct relevance to child survival and which were heavily influenced by factors within the DOH's control. The selected indicators related to child immunization, maternal tetanus toxoid immunization, delivery by trained personnel, prenatal care, availability of family planning services, availability of ARI treatment/case management, oral rehydration use, and contraceptive use.

The evaluation team finds the program areas to which the selected indicators relate to be highly relevant and appropriate: immunization, ORT, ARI, maternal care and FP are high-impact MCH interventions, specifically focused on and expected to improve in coverage under the CSP.

However, numerous problems were noted in the way the actual indicators for these programs were constructed and measured. Indeed, this was the weakest area in an otherwise superb program design. To start with, accurate baselines were not known at the time of initial establishment of many of the

indicators; in some cases, no baseline was available and in others, baselines were taken from relatively unreliable sources. Baseline and planned end-of-program data sources were often not comparable in reliability, definitions and inherent bias. Badly needed but not undertaken was a nationally representative survey to establish baselines for the key indicators at the start of the program. Over the course of the program, the lack of needed baseline information led to a number of ad hoc data collection efforts which could have been avoided through a fewer, better chosen measurements at the start of the program.

The CSP's mid-term evaluation highlighted the service delivery indicators as a problem area, a finding also noted by a Technical Advisor for programs and evaluation added to the TAT in 1991. As a result, six of the nine indicators were substantially revised. Even with these revisions, the evaluation team encountered significant difficulty in assessing changes in service delivery. Problems included: non-comparable baseline and 1993 data sources; and, data sources intended for 1993 use which were either not implemented or failed to measure the indicator as originally defined.

Since the service delivery benchmark was an outcome of achievement of the other, policy-related, benchmarks, these problems had no detrimental effect on program performance. However, they made it substantially more difficult to measure performance and impact, requiring the evaluation team to in several instances repeat the indicator formulation process from independently researched data sources -- a time-consuming effort which, had it not been done, would have led to an obscuring of very real achievements. Inadequate attention to the use of program data can lead not only to a failure to spot problems but also to a failure to document successes. Most important, the problems encountered speak to a need for capacity-building and better coordination with respect to the DOH's ability to analyze and use data for program planning, monitoring and evaluation -- a particularly critical area given its new post-devolution role.

Since achievement of the nine service delivery indicators is a direct measurement of achievement of program purpose, the team's findings are detailed in Section C: Achievement of Program Purpose below.

C. Achievement of Program Purpose

As has been described in the preceding section on program implementation, all prescribed performance benchmarks were met and, in most cases, they achieved their desired policy objective. Child survival services received a higher degree of attention and resource allocation at all levels, and were delivered in a much more targeted and focused manner; the range of interventions delivered increased to include CARI and a full range of FP. Prior to devolution, movement was being made towards a more decentralized mode of operation with bottom-up communication and input being heard and incorporated by the top.

Issues of financial sustainability in the health sector received serious attention and, for the first time, were seriously addressed. GOP resource allocation to child survival increased and was utilized in a manner congruent with the program purpose. Of particular importance was the utilization of these funds to support effective training in ARI case management and family planning at the periphery.

Less effective were efforts to integrate of child survival activities, expected to result in the decrease of duplication of supplies, capital inputs and manpower, less difficult program management and in greater coordination of donor-funded as well as DOH activities. The impact of meeting the designated benchmarks in this area was mixed. Previously vertical (and multiple) reporting and supervisory forms and procedures were replaced by the effective, user-friendly FHSIS and ISC. This certainly reduced paperwork and enabled provincial, regional and central level program managers to carry out monitoring and supervisory functions within a broadened MCH context. However, a vertical program approach still prevails in the child survival interventions, due to the continuing vertical division of work among program

staff from provincial level up and vertical program monitoring and evaluation procedures. These have prevented internalization of the integration concept under the CSP and is apt to continue to do so unless changed, no matter what training is provided or workshops held.

This problem is somewhat offset by the fact that service delivery comes together under a single provider at the field level. Services there are delivered in an integrated manner; when missed opportunities occur at that level it is generally a result of a natural tendency on the part of providers to be more responsive to client-identified priorities than to initiate services the client does not request, compounded by the lack of a systematic tool for providing the full range of services at each client contact. Otherwise, services by PHNs and barangay midwives have been and still are delivered in an integrated manner, even if unfamiliar with "integration" as a concept. This was the case well before the DOH decided to move towards integration.

The FHSIS and ISC strengthened field service delivery in other ways: facilitating supervision of midwives by PHNs via establishment of clear, measurable and transparent criteria; reduction in paperwork; means of ready assessment of overall MCH program performance at the barangay, municipal and provincial levels, and creation of an invaluable tool (the TCL) for midwives to organize their work around.

The population seems to be internalizing health messages as a result of the DOH's IEC efforts. For example, the 1987 NHS indicated that 62% of women had heard of ORESOL (commercially available ORS packets), but only 30% had used it. By 1993, 84.5% of women know about ORS packets, and more than half (54.6%) had used them (1993 DHS), indicating a 22.5% increase over in knowledge about ORS packets from 1987 to 1993. Health care providers in the field in all four provinces visited articulated a perception that there has been a marked increase in "health consciousness" among the populations they serve over the past five years.

The nine service delivery indicators selected in benchmark I.B.1 as measurements of increased service delivery accurately reflect the child survival services of greatest potential impact in the Philippines and will now be examined as an index of achievement of the program purpose. As the definitions and measurements proposed in the program design presented technical difficulties for reasons already outlined, the team opted to address the spirit rather than the letter of this benchmark and exercised its professional judgement in determining whether or not improvement had occurred in the service delivery indicator over the time period 1988 - 1993 given the best data available. The answer is certainly yes as regards infant/child care indicators, less so with respect to maternal care:

1. Child Immunization: Percentage of children immunized by age one: the target was 85% against a 1988 service statistic baseline of 65%. The FHSIS yielded a coverage rate of 90% in 1992. It should be noted, however, that (a) service statistics are not the best measure of immunization coverage due to inherent biases in both numerator and denominator; and, (b) the service statistics system in 1992 was entirely different from that in place in 1988. The 1993 Demographic Health Survey, a population-based, nationally representative survey relatively free of the numerator and denominator biases inherent in service statistics, is a better source of immunization coverage estimate. Since the DHS included data on the immunization status of all children under five, it is possible to estimate the level of coverage four years ago by looking at differentials in coverage by age group. This method fails to capture children who died before the age of five in the denominator for that age cohort, but the effect of this is apt to be small, with the bias in the direction of over-estimating prior years' coverage and hence under-estimating the degree of increase in 1993 (children who died were less likely than average to have been fully immunized). The DHS suggests a 49% coverage level in 1990, rising to 62% in 1993, confirming that a substantial increase in child immunization coverage did take effect over the course of the project, although the absolute levels of coverage, both in the early and late years of the project, are significantly lower than those suggested by service statistics.

**Table 3.a: Child Immunization
Percentage of Fully Immunized-Children (FIC)**

<u>SOURCE</u>	<u>1988</u>	<u>1993</u>
HIS	65%	90%
DHS	49%	62%

2. Maternal tetanus toxoid immunization: a baseline of 37% was originally taken from 1988 service statistics, and later revised upwardly to 50% based on a 1991 cluster survey conducted in 1991, two years into the program. The FHSIS yields an estimate of 70% for 1993 and similar rates were obtained in post-NID cluster surveys that same year. By contrast, nationally representative data from the 1993 Demographic Health Survey suggests a baseline of 39% for births occurring in 1988, consistent with the initial baseline estimate for that period, but an increase to only 42% in 1993. However, it should be noted that the DHS measure reflects only tetanus toxoid given to the woman during the pregnancy in question. It fails to take into account TT given in prior pregnancies and TT given to the woman when not pregnant, which is significant since the EPI program has been providing TT to all women of reproductive age on the well-attended National Immunization Days. Hence, the actual level of protection in neonates is somewhere above this 42% figure, while probably still less than the 70% estimate from service statistics.

It is, however, of concern that the administration of TT during pregnancy does not seem to have increased much over the years of the program, despite a high rate of pre-natal care. Indeed, the data strongly suggest that TT is not being routinely given on pre-natal visits, a suspicion further reinforced by findings in the 1993 Safe Motherhood Survey that pre-natal visits often fail to deliver specified maternal interventions.

Table 3.b: Tetanus Toxoid Coverage

<u>Source</u>	<u>1988</u>	<u>1991</u>	<u>1993</u>
HIS/FHSIS	37%	-	70%
DHS	39%	44%	42%
Cluster Surveys	-	50%	73%

3. Safe Delivery: the selected indicator included delivery by all trained personnel, including hilots. However, while population-based survey data is available on the category of birth attendant, the distinction between a trained and untrained hilot is difficult to make on retrospective questioning of the mother. The team has serious reservations about the ability of the FHSIS to capture this difference as well. This is a significant flaw since hilots account for the majority of deliveries in the Philippines, and anywhere from a quarter to one-half are thought to be untrained. What can be said is that the percentage of deliveries by doctors, nurses and midwives have increased from 48.8% of births in 1988 to 55.1% in 1993, while the relative percentage of deliveries by hilot (trained or untrained) and by untrained persons (relatives etc) declined over the same period.

4. Pre-natal care: an indicator of the percentage of all pregnant women served by DOH (as opposed to the private sector) receiving at least three prenatal visits was selected, with a baseline of 48% obtained from a cluster survey conducted two years into the program period and targeted to increase to 80% in 1993. The available 1993 data from the DHS does not distinguish between care provided by the DOH versus other sources. In any case, the usefulness of such a distinction is questionable. A woman may in the course of her pregnancy receive pre-natal care from both DOH and non-DOH sources; further, DOH services (IEC, counselling from DOH field personnel) may influence a woman in the decision to seek pre-

natal services even if she actually obtains them from a non-DOH source. Using the 1993 DHS birth histories a 1988 baseline of 70.3% and 1993 figure of 70.9% of births receiving three or more antenatal visits is obtained. These figures are inclusive of all pre-natal care sources, public or private.

Pre-natal care coverage, therefore, was already high at the start of the project and this coverage level was maintained, but did not increase. The initial baseline estimate for this indicator was low. Measurement of DOH services separately from all pre-natal services is neither feasible nor useful. Of greater concern than the coverage is the content of pre-natal services delivered. 70% of women are receiving 3 or more pre-natal checks but the 1993 Safe Motherhood Survey found that of pregnancies for which pre-natal care was received from a doctor, nurse, or midwife, only 63% received tetanus toxoid as a component of the prenatal visit. Other key components of prenatal care were likewise underdelivered.

5. Family Planning: Family planning program performance was measured by three indicators, two relating to service availability/program inputs and the third to actual performance as demonstrated by contraceptive use.

Service availability was measured by two indicators: (a) the percentage of DOH physicians, nurses and midwives at the district level down trained in provision of a specified range of FP methods for that level of facility; and, (b) the percentage of BHSEs, RHUs, and District hospitals providing a range of FP services defined as appropriate for that level of facility. These indicators benefitted greatly from revisions made in 1992 (approved by USAID) which clearly defined the type of personnel and facilities to be measured, the methods to be found at each level and the criteria for determining whether a facility actually delivers the specified FP services, taking into account such pre-requisites as presence of trained personnel and supplies. Accurate baseline data was unavailable at the start of the project and the estimates used proved too high when compared to a survey done in 1991; both the baseline and target were revised accordingly. The revised indicators called for an increase in the percentage of trained personnel from 59.5% to 75% by 1993, and in the percentage of facilities providing service from effectively none (0 - 1.9% at various levels) to 25% district hospitals, 50% RHUs and 25% BHSEs by 1993. A July 1993 facility survey by the DOH shows that these targets were not only met, but exceeded. This is further supported by the reports of FP training carried out between 1990-93 and by field interviews with nurses and midwives, the overwhelming majority of whom reported receipt of such training and a subsequent expansion in the FP services they actually provide.

Contraceptive use was measured by the Contraceptive Prevalence Rate, revised to specify program (modern) methods since it is these which the DOH program influences. An accurate baseline of 22% prevalence was available from the 1988 Contraceptive Prevalence Survey, and accurate, comparable data for 1993 is available from the 1993 DHS, indicating a rate of 25%. This falls short of the specified target of 35%; however, that target was completely unrealistic. The Family Planning program in the Philippines was at a near standstill in 1988 with few of the required program inputs in place, as demonstrated by the service availability indicators described above. These pre-requisites had first to be in place before the DOH program could effect an increase in CPR; as noted above, these inputs were achieved only after 1991. The 3 percentage point rise in CPR between the 1988 CPS and 1993 DHS therefore represents only 1-2 years of full program implementation; a CPR rise of 2% per year is consistent with a highly successful FP program. Hence, the program appears to have performed very well once in place circa 1992. It should also be noted that this 3 percentage point increase masks an approximately 30% increase in absolute number of contraceptive users, due to the rapidly expanding number of women of reproductive age. The program had to reach and serve close to a million additional users to attain a 3 percentage point rise in CPR -- precisely why even the most successful FP programs seldom achieve more than a 2 percentage point rise per year.

Table 3.c: Family Planning

- A. DOH physicians, nurses and midwives at the district level down trained in provision of a specified range of FP methods for that level of facility:

1988 = 59.5%

1993 = 75%

- B. DOH facilities providing a full range of FP services:

	1988	1993
BHS	1.9%	44%
RHU	0.5%	79%

- C. Contraceptive Prevalence Rate (modern methods)

1988 22%

1993 25%

6. CDD: The oral rehydration therapy (ORT) rate was selected as an indicator of CDD performance, with a target of 60% use over a baseline given as 25%, apparently with reference to treatment in children experiencing diarrhea in the 24 hours prior to a cluster survey conducted in 1991. The available 1993 data (from the DHS) used two week recall. The distinction is important, since longer recall periods lead to a bias in favor of more severe episodes of diarrhea, and hence higher use rates. Unfortunately, no really comparable data sets are available. The 1987 National Health Survey gives an ORT treatment rate of 48.1% for the last diarrhea episode recalled by the mother, i.e. reflects on average a greater than two week period. The effect of this will be a bias towards a higher treatment rate since mothers are more likely to remember diarrheal episodes they treated than episodes (usually mild) for which no type of no treatment was given. The two-week recall treatment rate can thus be assumed to be something lower than 48% at the start of the program (with the 24 hour recall rate lower still), and is known to be 61% in 1993. A significant increase in ORT used rate has occurred, although the exact increase cannot be determined for the reasons just stated. It is certainly greater than the difference between 48% (from indefinite recall) and 61% (two week recall) and probably over 20 percentage points.

Table 3.d: Oral Rehydration Therapy

- A. ORT Knowledge: % Mothers Aware of Oresol

1987 62%

1993 85%

B. ORESOL Ever Use

1987 30%

1993 55%

C. ORT Use Rate
(2 week recall)

1987 <48%

1993 62%

7. CARI: ARI service delivery was measured through an increase in the percentage of field health personnel with DOH training in ARI case management, expected to increase from 0% outside of a demonstration project in Bohol to 70% by December 1993. This target was achieved, with an increase in midwives trained from 0 to 72%; PHNs, from 0 to 84%.

Table 3.e: Control of Acute Respiratory Disease

Trained in ARI case management:

	Midwives	PHNs
1988	0%	0%
1993	72%	84%

The above-documented increase in national program performance as measured by each of the selected service indicators is further supported by field visits and examination of service statistics in the field. Although not as accurate as population-based surveys, service statistics are a fairly reliable indicator of changes over time while the same system is in place. In all the municipalities and cities visited, both service statistics and provider interviews demonstrated a significant improvement in program coverage since 1988, most marked around 1990-91.

A decrease in mortality is noted as well, suggesting that the achievement of program purpose did in fact contribute to achievement of the goal of decreasing infant/child mortality. In particular, examination of data at the municipality/city level in the four provinces and two cities visited revealed a dramatic decrease in deaths from ARI. In Talisay municipality, Cebu, for example, the overall death rate from pneumonia was 201/100,000 population in 1989 with 35 infant deaths ascribed to this cause; in 1994, the overall rate had dropped to only 66/100,000 and the total infant deaths recorded as due to pneumonia were only 3 (total population = 100,000 with about 2,700 live births annually). While reporting of infant deaths is undoubtedly incomplete, there is no reason to expect that this changed between 1989 - 1994, and little question but that a marked decrease has taken place in ARI deaths among infants and children in the area. Findings in three other municipalities spanning the socioeconomic gamut were similar. Likewise, a pattern of decreased infant mortality primarily as a result of decreased deaths from pneumonia (and, secondarily, diarrhea and vaccine-preventable diseases) was equally observed in the cities of Zamboanga and Lapu-Lapu, and at the provincial level in Cebu and Albay.

These numbers are derived from vital registration and the FHSIS, and certainly underestimate mortality. However, the comparison across time is apt to be fairly reliable since the biases inherent in these sources remained constant. Data in these areas indicated no decrease in deaths from congenital anomaly or in adult deaths from degenerative diseases over the same period, adding to the plausibility of the declines demonstrated in a few areas which were simultaneously targeted by programs.

A comparison of the Philippine Health Statistics 1988 and 1993 shows a striking decline in ARI deaths (by a factor of 50%), large declines in measles and diarrheal deaths, and a more modest decrease in deaths from tetanus, suggesting that this pattern holds true for the nation as a whole.

Table 4: Mortality Trends

1. Location: Talisay municipality, Cebu

	<u>1989</u>	<u>1994</u>
Pneumonia deaths/100,000	201	66
Pneumonia deaths- infants (#)	35	3

(total population = 100,000 with about 2,700 live births annually).

2. Location: Albay province, Bicol region:

	<u>1988</u>	<u>1994</u>
IMR	26.5	12.4
Infant Deaths (#) from:		
Pneumonia	140	93
Diarrhea	31	14
Neonatal tetanus	14	0

3. National Level:

Mortality By Cause (all ages)
Per 100,000 population

Cause	<u>1988</u>	<u>1993</u>
Pneumonia	81	40
Diarrhea	14	4
Measles	13	2
Tetanus	2	1

Source: 1988 and 1993 Philippine Health Statistics, DOH

As with all citations from the vital registration systems and health service statistics, the above are presented for comparison purposes only. It is noteworthy that deaths from such causes as hypertension and heart disease do not show a significant decline between 1988 and 1993 but rather remained unchanged or even increased, lending credibility to the hypothesis that there has been a real and

substantial decline in deaths from vaccine-preventable diseases, diarrhea and pneumonia overall. Unfortunately, the 1993 data are not broken out by age groups. However, the decrease almost certainly reflects a decrease in infant/child deaths.

Maternal health care gains are less apparent, reflecting both program factors and the difficulty in establishing good maternal health indicators, a problem not unique to the Philippines. Pre-natal coverage is fairly high but the content of these visits appears inadequate. There has been a small but real shift towards increased deliveries by trained personnel. Accurate population-based national data on TT coverage is not available and future surveys will need to carefully adjust the indicator used to capture lifetime doses of TT.

The single most important maternal health intervention in the Philippines, in terms of feasibility and potential impact, is family planning. Family planning service delivery did not accelerate until the last two years of the project due to the time first required to put service delivery inputs in place, but showed a very credible rise thereafter. Gains in family planning are too recent to have impacted on mortality but significant effects can be expected as otherwise high risk births are either averted or better spaced.

D. Sustainability of Achievements

As the preceding sections have documented, the CSP made substantial contributions to improved child survival service delivery. Further, the recurrent costs of these improved services was effectively absorbed by the GOP following the end of project disbursements, and substantive work on health care financing begun under the CSP continues.

However, the primary tools through which the CSP achieved its effect have either fallen into disuse or been rendered ineffective in the wake of an unanticipated move by the GOP to remove field health services from the administrative control of the DOH and devolve that authority to political leaders at the municipal level. This reflects the sudden and profound nature of the change itself and is not, in the judgement of the evaluation team, a reflection on either the program design or its implementation by the DOH.

In the wake of devolution, APBHPs have largely fallen into disuse; the flow of FHSIS data is blocked above the municipal level, although the system remains intact below that point; supervisory systems developed previously are not appropriate tools for monitoring functions not accompanied by line authority; budgets and resource allocation decisions are occurring at a level and by personnel not reached by the excellent training and procedures put in place during CSP; field personnel are largely without technical supervision and direction from higher trained health personnel; and the DOH has lost many of the administrative powers it relied previously upon in shaping and directing the national health program, while not yet having developed the use of other tools.

As a consequence, rather than a re-configured health system there is a shattered and fragmented one; rather than new relationships between the DOH and devolved agencies, there is an absence of relationship. Technical supervision is largely absent, monitoring is weak, and technical support inadequate and erratic. Devolved personnel feel abandoned; provincial and regional health personnel (both devolved and retained) are keenly aware of the problems but feel unable to respond in the absence of direction from the DOH.

Sustaining and expanding on the impressive achievements of the Philippine Child Survival Program will be heavily contingent on successful management of the devolution process, both by the LGUs and the DOH.

To date, the focus of GOP and donor attention to devolution has been on enabling the LGUs to effectively take on their new role in implementing field health services. While there is room to further strengthen these efforts, by and large the LGU side of the equation is being appropriately addressed.

However, insufficient attention has been paid to the DOH's new role and changes needed to effectively undertake it. The response of the DOH as an institution to devolution has to date been less than adequate. The systemic transformations required have been underappreciated and remain largely unimplemented. Devolution has been treated as a side issue confined to a separate service set up for that purpose, much in the way that a new service delivery intervention would be handled. LGAMs has been an effective mechanism for implementing the transfer of assets and personnel, but neither it nor any other service can substitute for the institutional change and growth required if the DOH is to continue to fulfill its mandate of guiding the health sector post-devolution.

The abandonment of APBHP is particularly unfortunate in that it has the potential to address three major weaknesses in the devolution of health services: the lack of municipal-provincial linkage, the isolation of provincial hospital services from primary and preventive health services, and the separation of resource allocation decisions from technical knowledge of health resource requirements.

In an attempt to delineate the relationships and responsibilities between the LGUs and the DOH, particularly with regard to priority national programs such as EPI, CARI etc, a mechanism has been developed entitled the "Comprehensive Health Care Agreement" (CHCA), a document signed by the DOH and the provincial authorities with respect to health programs throughout the province. The sheer number of LGUs (over 2,000) makes any other arrangement impractical. However, the actual authority for all health care services other than provincial hospitals rests with the municipalities, over whom the province has no formal authority. In theory, the province consults with the municipalities in negotiation of the CHCA and enters into agreement with them in its execution. In practice, this was found not to have occurred in any of the four provinces visited; the impression that the municipalities are largely absent in the CHCA process nationwide is confirmed by other informants spoken to. Although numerous recommendations were made that the CHCA be based on provincial APBHPs, this rarely occurred, in part due to time constraints and the sheer magnitude of the task facing LGAMs in trying to rapidly negotiate agreements with all the provinces and cities.

A somewhat analogous situation exists with the LGU Performance Program (LPP) component of the new USAID Integrated Family Planning and Maternal Health Program (IFPMHP). Under the LPP, the DOH enters into agreements with selected LGUs for performance-based disbursement of supplemental health resources upon achievement by the LGU of mutually agreed upon performance benchmarks. As in the CHCA, the agreement is signed at the Provincial level, with the expectation that the province will in turn execute agreements with its municipalities. And, as with the CHCA, the team found that this was not in fact occurring in the LPP provinces visited.

The CHCA and the LPP agreements both present natural entry point for the re-activation of the APBHPs post-devolution, a suggestion made by a number of DOH and devolved health personnel during the course of the team's visits and interviews. This would serve both as a lever for re-introducing a very valuable tool for strengthening health planning and health service implementation, and as a means for bringing the municipalities into the CHCA and LPP agreement process, addressing an otherwise potentially critical weakness in these vital processes.

The flow of management information to the DOH (i.e., the FHSIS) urgently needs to be re-established, for several reasons. For one, it is a test case in the devolved setting of the revised relationships, responsibilities and authorities. Under the LGC, LGUs are required to comply with health reporting requirements set by the DOH; and the chain of command within the LGU is from the MHO to the LCE. Hence, the DOH has the authority to require regular reporting, and the appropriate channel for this would

be through the LCE. Failing to assert this authority, and not working through the new chain of command, runs the risk of sending undesirable signals to the field. The DOH appears unsure of its role and unable to utilize the powers it has under the LGC; unaware or nonsupportive of the new chain of command in the field; and, possibly, even covertly supportive of field protests against devolution. A disorganized approach to this problem has resulted from a lack of cohesive central guidance, with provinces, regional offices and central office services ad libbing their own different approaches, which only adds to the confusion. Furthermore, most ad hoc solutions being tried serve to bypass rather than work within the devolved framework.

Another reason for the urgency in re-establishing the flow of reporting is that information is a very powerful tool, and its skillful use is one of the chief means through which the DOH can achieve its ends in the future. There is a general perception within the DOH that devolution has rendered the department impotent. In fact, what has really happened is that the DOH has failed as yet to make use of the powers retained by it under the LGC -- and the longer it takes to do this, the harder it will be to assert leadership. The DOH urgently needs to move rapidly in strengthening its capacities in the areas of monitoring/evaluation, policy formulation, advocacy and standard-setting, licensure and regulatory functions. All of these activities draw heavily upon the skillful use of information. Further, the DOH's credibility as leader and spokesman for the health sector is compromised if it is not thoroughly aware of sectoral performance.

With respect to integration of MCH services, the new USAID Integrated FP/MH Program as presently designed tends towards a vertical approach to FP. There are program opportunities to strengthen other aspects of MCH through the same vehicles being used for FP -- eg: competency-based training, IEC, operations research. This is of particular concern with regard to child health; a substantial maternal health program funded by a consortium of other donors will address non-FP aspects of maternal care.

The DOH is aware of the problems inherent in its previously vertical training and is seeking ways to integrate MCH training in the future. Meanwhile, there is a need, particularly in view of the large amount of training already provided over the last five years, to assess actual field competencies and develop a more bottom-up, competency based training program with individualized competency-based training plans as the cornerstone. This is already included in the IFPMHP design with respect to FP and could logically be extended to encompass all of MCH.

While the institutional transformation required for effective leadership in the devolved setting has been slow in occurring, the DOH has done an excellent job in keeping the substantive content of its programs, with a preventive health/MCH focus, alive. The content and emphases of these programs is appropriate to the present health context, as well demonstrated by the dramatic reductions in mortality which these programs have recently achieved. One area that will need continued and perhaps increased attention is prophylactic vitamin A supplementation. The current DOH strategy for routine MCH services is to administer VAC only to "high risk" children under five, defined as those who have first, second or third degree malnutrition, and those with ARI, measles or diarrhea. These criteria between them would probably include a majority of Philippine children, and there is no reliable practical means of ensuring coverage for all those meeting these criteria in the absence of a general VAC distribution to all under fives.

In effect this has already been done through the inclusion of VAC in the National Immunization Days and annual National Micronutrient days. However, there is no mechanism for administering VAC through routine preventive services in the RHU/BHS in the case of those who miss the NID and National Micronutrient day distribution for one reason or another. All facilities visited reported an insufficient supply of VAC for use outside the NID and ASAP days; also, many reported that VAC administration on those days is not being recorded on Road to Health cards, making it impossible to ascertain the VAC supplementation status of children seen in the RHU or BHS. It is expected that the NID, instituted as

part of the global eradication of polio effort, will be discontinued in coming years. This will need to be followed by a clear policy of routine VAC supplementation to all under fives and adequate VAC supplies to the field if the substantial mortality impact of this intervention is to be sustained.

Another area where expanded intervention might be useful is in primary curative care of children. Rural Health Midwives in the Barangay Health Stations, and, to a lesser extent, the PHNs in the RHUs, would benefit by additional training and tools to both better integrate their management of sick children and expand the range of illnesses they are able to treat. The latter is currently limited to diarrhea and ARI, which were taught in a vertical, isolated manner although in fact children often present with both problems simultaneously. Midwives in the BHSs would especially benefit as they work alone, with limited daily contact with other health personnel. There is currently no standard treatment manual for childhood diseases. A new Midwives Integrated Communication Aid for Maternal Child Health (MICAMCH) has just come out and is in the process of distribution, but this is essentially an IEC tool. An excellent manual on maternal health has been prepared but does not include child health.

One important caveat must be made with respect to any effort to expand and improve management of sick children in the RHUs and BHSes: such efforts will invariably result in increased utilization of those facilities and increased requirement for drugs and other medical supplies. The financing of drugs and other supplies is a major problem in public health systems throughout the world; in the Philippines post-devolution, it has become a particularly thorny problem since procurement for all but specific MCH "program" drugs (i.e. cotrim, ferrous sulfate, ORESOL, vitamin A and vaccines) is now left to the individual LGUs. The LGUs lack technical knowledge with respect to drugs (quality control concerns, appropriate drugs for different levels of facilities, formulary vs non-formulary preparations, etc). In addition, procurement at that low a level limits the range of available sources and prevents bulk procurement. Under the best scenario it will remain 2-3 times more costly to provide the same quantity of supplies that it did pre-devolution, an increase the system can ill afford to sustain.

Shortages of drugs were cited as the single greatest service delivery problem by doctors, nurses, midwives, barangay health workers, mayors, and patients in every location visited by the team. While this is hardly a new concern, it has certainly gotten worse since devolution and may be expected to remain so unless some mechanism for standardized bulk procurement is instituted. In addition, qualitative problems have become commonplace: expired drugs, non-formulary drugs, inappropriate substitutions etc, reflecting the lack of technical expertise in the procurement process. Another commonly heard complaint is the dispensing of drugs directly by local politicians with the stock kept in the political office rather than the health facility.

The drug supply problems ought not to be seen as an inevitable result of devolution. Through its regulatory and licensing powers, there are several avenues open to the DOH to explore in tackling this issue. Certainly the DOH's post-devolution mandate includes protection of the public from unsafe pharmaceutical practices, wherever they may occur. However, the DOH conceptually needs to redefine its role boundaries from the confines of its own (now diminished) administrative structure to encompass the whole of the nation's health -- all health care issues and policies; all health care services, be they private, NGO or governmental; LGU-devolved or retained. This represents a major shift in thinking and requires, in turn, considerable restructuring and capacity-building within the Department in the use of tools other than direct administrative control to achieve technical ends.

V. LESSONS LEARNED

1. The use of a performance-based program mode of disbursement, rather than project assistance, can be a highly appropriate and effective instrument for achievement of health sector goals in settings such as the Philippines where there is:

- * a broad consensus between the donor and the host government on the needed policy reforms;
- * a sincere commitment on the part of the host government agency to the implementation of these reforms; and,
- * a high caliber of personnel within the host government implementing agency with the training, experience and skills necessary at all levels to enable it to independently identify and implement appropriate means of achieving policy objectives and performance benchmarks.

2. Implementation of a few well-chosen policy reforms in the health sector can contribute to tangible reductions in mortality in as little as five years.

3. Decentralization of health services, particularly when carried outside the administrative confines of the Department or Ministry of Health, requires major conceptual, operational and structural readjustments on the part of those institutions.

4. When lines of administrative control are changed or removed, needed technical linkages may also vanish unless a conscious effort is made to re-define them in the new context.

5. Service-delivery indicators (purpose-level indicators) need to be selected with care and investments made to the maximum extent possible in obtaining accurate baseline measurements at the onset of any program expected to impact on health services. Care must be taken to ensure that baseline and end of project measurements will be comparable and reliable.

VI. CONCLUSIONS

1. The CSP design was an appropriate response to constraints in the effective delivery of child survival services. The policy reforms and objectives identified reflected accurate analyses of the problems and measures required to overcome them in a sustainable manner. The performance benchmarks selected were, on the whole, accurate measures of achievement of policy reform.

2. The use of a performance-based program mode of disbursement, rather than project assistance, was an appropriate instrument for achievement of program purpose in the Philippine context, where there was agreement as to what should be done, and the DOH had the technical and managerial capacity, given adequate resources and leverage, to do it.

3. DOH implementation of the CSP was effective, well coordinated, and highly accountable. All benchmarks were met, not only on paper, but in fact, resulting in tangible policy reform. The DOH carefully monitored progress towards achievement of the benchmarks and, more important, continuously assessed, in partnership with USAID, the extent to which benchmark completion fulfilled the intent of policy reform. The DOH effectively leveraged other donor assistance and GOP resources in implementing the CSP.

4. Technical assistance provided under the CSP was highly effective in achieving the defined scope of providing supportive inputs to the DOH in achievement of performance benchmarks. Impact on long-term institutional capabilities was favorable but much more limited, owing to the structure of the TAT's Scope of Work which was not designed for long-term capacity-building but rather, enhancement of near-term DOH performance.

5. USAID's management of the CSP more than adequately ensured accountability and performance; if anything, the USAID Mission was over-zealous in the documentation it required, resulting in more work than was necessary to ensure and document conscientious implementation of the program. Performance-

based program assistance in fact provides more, rather than less, accountability than conventional health sector project assistance by defining and measuring progress towards the investment's intended outcomes. The regular performance reviews jointly conducted by USAID and the DOH were highly effective in identifying difficulties in achieving benchmarks early enough to allow for appropriate corrective action. Most importantly, the focus was kept on the desired result rather than (as often occurs in conventional project assistance modes) on specified inputs. Benchmark achievements were critically examined against that measure, not merely against the technical fulfillment of the terms of the benchmark.

6. The CSP policy reforms were in turn highly effective in achieving the desired program purpose. Particularly high-impact changes included:

- increased prioritization of child survival
- identification of underserved areas and effective, decentralized health planning from the bottom up
- definition/implementation of a well-chosen core package of MCH interventions, including CARI (new) and FP (revived)
- a comprehensive IEC strategy utilizing various media to increase consumer demand and promote improved health behaviors
- strengthening of supervision through integrated, criteria-based supervisory systems and health information systems

7. Significant, measurable gains in service delivery resulted, particularly in EPI coverage, ARI treatment, FP service availability, and knowledge and use of ORT. Contraceptive use, although short of the target originally set, is actually quite high given that the 3 percentage point increase in CPR by 1993 reflects a little more than a year of full service delivery under a revived FP program. With unmet demand for family planning still quite high, there is scope for continued success if service delivery can be maintained and accelerated.

8. Progress with respect to the maternal health services was less impressive. This reflects a lack of accurate baseline information when the targets were established, technical problems with the measurement of the indicators selected, and apparently low provision of tetanus toxoid immunization during pre-natal visits. The actual level of maternal tetanus toxoid coverage is hard to assess with data currently on hand; there does not seem to have been an increase in immunization given during pregnancy (despite a high rate of pre-natal visits), but the impact of this is offset to an unknown extent by the protective effects of immunizations given prior to pregnancy. There is a need for better understanding of the nature of pre-natal services being provided and for development of revised indicators for both TT immunization and pre-natal care (emphasizing content rather than quantity for the latter). The difficulty in measuring maternal health care performance is not unique to the Philippines and reflects in part the poor state of the art world-wide with respect to improving and monitoring maternal health. In addition, there appears to be a need to strengthen the DOH's capacity to effectively identify information needs and utilize data (see also # 10). With respect to TT coverage, the program has in recent years expanded its focus from a focus on immunization in pregnancy towards routine TT for all reproductive aged women on National Immunization Days (NIDs). This is an appropriate strategy but requires a corresponding change in coverage indicators and their measurement. The program has not to date undertaken routine immunization (DT) of school-aged children, which would over the long-term greatly increase the level of protection against tetanus.

A new initiative in maternal care (the Safe Motherhood and Women's Health Project) funded by a consortium of (non-USAID) donors provides substantial resources in addressing these issues.

9. While an increase in child immunization coverage certainly occurred between 1988 and 1993, there is an unusually wide gap (>20 percentage points) between the absolute coverage figures obtained through service statistics and those obtained through population-based surveys such as the DHS. It is normal for service statistics to yield a higher estimate, but not to this large an extent. The reasons for this disparity are unknown and require further investigation.

10. A consistent and credible pattern is seen of decreased infant/child deaths from pneumonia, diarrhea and immunizable diseases between the years 1988-1994, suggesting that the achievement of the project purpose (improved delivery of child survival services) did, in fact, contribute to the goal of decreasing infant/child mortality. The greatest impact appears to have been in decreased ARI deaths, most likely attributable to the combined effect of the new CAR¹ initiative, improved measles immunization coverage, Vitamin A distribution and other nutritional interventions. The reduction in ARI deaths appears to have been in the range of 25 - 50%, -- resulting in over 10,000 infant/child deaths averted per year.

11. The DOH as an institution is having difficulty operationalizing its new roles post-devolution and maintaining effective health sector leadership in the devolved context. Problems are conceptual, operational, and structural. Conceptually, both managers and personnel have difficulty envisioning effective leadership through means other than line authority, and the DOH tends to see itself as primarily concerned with its own (now diminished) personnel and structures rather than with the national health system as a dynamic whole. Technical influence is seen as possible only through direct implementation. Operationally, DOH capacities in the key arenas through which it can continue to direct health sector are under-developed: policy; regulatory functions; advocacy; and the compilation, analysis, dissemination and strategic use of information. Structurally, the DOH has not defined the respective roles and functions of its central and regional offices, and the structural organization of the central office is still that of an implementing organization.

12. Many of the key innovations of the CSP have been disrupted following devolution, eg:

- Area/Program-Based Health Planning has fallen into disuse. Front-line health workers have reduced input into the planning process; less substantive health planning is being done overall; and program needs are less often linked up to the resource allocation process.
- the FHSIS remains intact at the municipal level and below, but the flow of data to the province and DOH is blocked, seriously impeding the ability of the Provincial health Offices and DOH to monitor and support program performance.
- technical/functional linkages between the DOH and devolved health personnel at the provincial and municipal level, and between provincial and municipal level devolved personnel, were inadvertently severed along with the loss of administrative line authority. As a result, technical supervision, monitoring and support to the RHUs/BHSEs has been substantially weakened; and hospital services are increasingly isolated from the preventive and primary services. The DOH and donors are attempting to interface with LGU health services at the level of the province, but province-municipality links are weak to non-existent, and primary services are under the administration of the municipality, not the province. There is no practically feasible means for interfacing directly with some 2,000 municipal LGUs; hence, it is vital that strong functional provincial-municipal linkages be established. APBHP can be a valuable instrument in effecting this.

problems with the procurement of adequate medical supplies for the RHUs and BHSes by the LGUs hinder delivery of general medical services at those facilities; increased resources are required to deliver the same level of inputs due to the higher costs of local vs bulk procurement.

13. Critical to sustaining the CSP gains is successful management of the devolution process. While considerable (and needed) government and donor attention has gone and is going towards enabling the LGUs to take on administration of field health services, there has been insufficient attention to the corresponding needs of the DOH and an under-appreciation of a) the vital role it has in the post-devolution context and b) the profound, systemic changes needed to enable it to optimally fill that role.

VII. RECOMMENDATIONS

For Action By the DOH:

1. Functional linkages between/ among the DOH and devolved health personnel/facilities at the provincial, municipal and barangay levels should be re-established on an urgent basis. The DOH should provide clear and specific direction along these lines. Appropriate tools should be developed and job descriptions/titles revised as necessary to clearly spell out roles and relationships in the devolved context. Monthly DIRFO-IPHO and IPHO-RHU meetings should resume and the necessary travel funds be provided to re-open channels of communication.
2. The role of the Regional Office post-devolution should be defined as a sub-center of the DOH central office, responsible for program monitoring and technical/logistical support to LGUs. Regional offices should be functionally reorganized in accordance with this mandate. Pilot work done in Region VII under the Health Finance Development Project could serve as a model for this re-alignment. Regional office input and suggestions should be actively solicited in formulating structural and procedural revisions.
3. The DOH should actively promote use of APBHP by the municipalities through linking it to negotiation of the CHCA and to any direct donor assistance to LGUs, eg: the USAID-supported LPP. This should be done as expeditiously as possible, but grand-fathered in so as to avoid creation of unnecessary delays in provision of assistance in the current GOP fiscal year. For 1995, it is recommended that all provinces be required to obtain copies of health plans from each of its municipalities, in whatever format has been used by the municipality, and to demonstrate that its provincial plan as reflected in the CHCA and LPP agreements (where applicable) reflect a compilation of these municipal plans. From 1996 onward, the same process should be followed but requiring that the municipal health plans follow the general guidelines of the APBHP— including compilation of input from each sub-unit (BHS) within the municipality. In keeping with devolved authorities under the LGC, APBHPs would be approved at their respective LGU level (municipality, province). Informational copies of the provincial APBHPs should be provided to the DOH (through the regional sub-center office) for use in planning DOH support activities only.
4. The DOH should move expeditiously to adopt a new organizational structure, as mandated under the LGC. Technical assistance should be sought to ensure that this re-organization optimally facilitates operations in the devolved context. The new organizational structure should:
 - specifically focus on post-devolution functions
 - mainstream LGAMS functions in place of a discrete service
 - provide clear direction, vision to staff and address corresponding staff development needs

- serve to strengthen the DOH in areas of policy formulation/implementation, legislation, standard-setting, licensing and regulation, monitoring and evaluation, research and strategic planning
- facilitate active participation by the technical services in the above functions as means through which the DOH will achieve technical objectives
- maintain a strong technical capacity but re-orient it towards support/technical assistance to devolved agencies rather than direct implementation

5. The DOH should provide clear direction to the services and regional offices in the nature of their new, post-devolution responsibilities and respond rapidly and systematically to operational problems which affect the ability of these units to implement these functions. Specifically, the DOH should formulate a coherent response to the problem of health service reporting from the LGUs and instruct the concerned DOH units accordingly. The thrust of such a response should be problem resolution within the context of devolution, rather than circumvention of it, and clear affirmation both of the DOH's retained authorities and of the authorities and chain of command of the LGU.

6. The DOH should continue and expand activities to strengthen its capabilities in the areas of policy formulation and implementation, regulation/licensure, advocacy, negotiation, research, monitoring and evaluation. Re-organization (see #4) should reflect increased staffing for these functions and increased involvement of technical services in same. Technical assistance and training, including targeted study-tours, should be utilized with external donor assistance sought as necessary.

7. The DOH should actively explore new means of ensuring the quality of field health service delivery within the devolved framework, eg. through the exercise of its regulatory, licensing and accreditation functions with respect to existing laws and in the development of new laws/regulations/procedures as necessary to protect and promote the public's health. For example, consideration might be given to a criteria-based accreditation process for health facilities other than hospitals (i.e., RHUs, BHSes).

8. The DOH should continue to place a high priority on basic child survival programs and make every effort to ensure that these are adequately funded, particularly in the immediate few fiscal years prior to the start of new donor investments. In particular, **the DOH should accord high budgetary priority to continued and expanded provision of MCH "program" drugs to the LGUs for the foreseeable future**, i.e.: cotrim, ferrous sulfate, VAC, vaccines and peripherals and ORESOL etc. DOH budget allocations should give a high priority to provision of these supplies in adequate amounts in recognition of the substantial mortality impact of these programs. In particular, a regular and sufficient supply of cotrim should be maintained and the LGUs should be provided sufficient VAC to provide routine supplementation to all children under five at six month intervals, both through the NID (if continued), ASAP and through regular MCH services.

9. The gap between FHSIS generated estimates of child immunization coverage and those of the DHS should be carefully researched, starting with an examination of the coverage by sampling unit from the DHS to determine if there was a generally lower rate of coverage throughout or whether there were some sampling units with exceptionally low coverage, pulling the average down. The latter would suggest a failure of the program (and the FHSIS) to reach certain segments of the population. Possible numerator and denominator biases in the FHSIS should be examined, eg: under-listing of target children, duplicate immunization of children inflating the numerator.

10. Given the highly successful experience with performance-based program assistance under the CSP, the DOH should attempt to negotiate this modality in assistance agreements with other foreign donors in the future.

For Action By USAID and the DOH:

11. USAID should consider expanding the performance matrix under the LPP component of the IFPMCHP to include tranche disbursements against performance benchmarks for the DOH in respect to policy changes supportive of its ability to support the LGUs, as described in recommendations #1-9 for the DOH above.

12. The LPP component of the IFPMCHP should include the following specific benchmarks for LGUs:

- development of APBHPs
- regular submission of FHSIS reports
- conduct of monthly IPHO-RHU meetings as a forum for technical exchanges

13. The training, IEC, research and program monitoring components of the new USAID funded Integrated FP/MCH Project training should be expanded to include the wider range of MCH interventions in addition to FP. Specifically:

- a) the FP competency based training component should expand to include integrated, competency-based FP/MCH training for midwives and nurses.
- b) the IEC component should integrate information on immunization, nutrition, ARI, CDD, pre-natal care and safe delivery along with its primary focus on FP.
- c) the operations research component should address both FP and MCH issues in general. In specific, OR should be conducted on:
 - (i) the feasibility and cost-effectiveness of various alternatives to the present system of LGU local procurement of pharmaceutical and medical supplies, including: (a) bulk procurement by the regional office for resale to LGUs at cost, and (b) subsidizing the cost of prescriptions filled at local pharmacies as an alternative to free drug distribution by the RHUs/BHSEs;
 - (ii) expanding the range of child illnesses managed by midwives and nurses at the BHS/RHU level through adaptation of the "10 step check" approach developed by USAID in Papua New Guinea. The 10-Step Check system is a simplified algorithmic system which coordinates and integrates the aspects of history taking, physical examination, diagnosis, treatment plus health education using one main tool - a desktop flipchart called the 10-Step Check List for All Sick Children. Used successfully with health workers of extremely limited education, it would certainly be feasible in the Philippine setting where the frontline workers are midwives with two years of formal health training and high school degrees. **Because this is likely to result in increased utilization of drugs at the periphery, it is recommended that this follow studies on improving LGU level drug supplies in sequence and be tested only in areas where drug procurement systems are well functioning.**
- d) the IFPMHP's monitoring effort should expand to include the following key MCH indicators, which should be collected through the annual NSO population-based surveys: child immunization coverage, ORT treatment rate (in children with diarrhea in the two weeks preceding interview), TT immunization status for women of child-bearing age (pregnant and non-pregnant), VAC coverage (children 6-60 months, lactating women). **This should then serve as the main source of quantitative program coverage data for the DOH FP/MCH services, reducing the need for what are now multiple, often**

duplicative , time-consuming data collection efforts of varying reliability. Care should be taken in the wording of questions, both in these national surveys and in the next DHS, to ensure comparability.

14. USAID should continue and/or expand its utilization of the performance-based program mode of assistance in the Philippine health sector as it has proven to be highly effective and accountable. Measures should be taken to disseminate this experience to other USAID Missions, particularly those in advanced developing countries, for possible replication.

ANNEX A: PERSONS CONTACTED

Department of Health

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Dr. Carmencita Reodica, Undersecretary, OPHS
Dr. Manuel Dayrit, Assistant Secretary
Dr. Linda Milan, Assistant Secretary
Dr. Reynaldo Instrella, Regional Director, DIRFO, Region V
Dr. Consuelo Aranas, Regional Director, DIRFO, Region VII
Dr. Lourdes Labiano, Assistant Regional Director, DIRFO, Region IX
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Mayor Dehlia B. Tiu, Talisay Municipality, Cebu
Dr. Jesus Fernandez, Provincial Health Officer, IPHO, Cebu
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Dr. Arturo Perdigon, Provincial Health Officer, Sorsogon, Bicol
Dr. Rodolfo C. Berame, City Health Officer, Lapu-Lapu, Cebu
Dr. Veronica Madulid, Provincial Health Officer, Albay
Dr. Rogelio Silapan, City Health Officer, Zamboanga City

Municipal Health Officers, Public Health Nurses, Rural Midwives, Barangay Health Workers, and hilots at:

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Sangat Barangay Health Station, San Fernando, Cebu
Talisay Rural Health Unit, Cebu
San Isidro Barangay Health Station, Talisay, Cebu
Cordova Rural Health Unit, Cebu
Gabi Barangay Health Station, Cordova, Cebu
Sorsogon Rural Health Unit, Bicol

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